

FIG.1

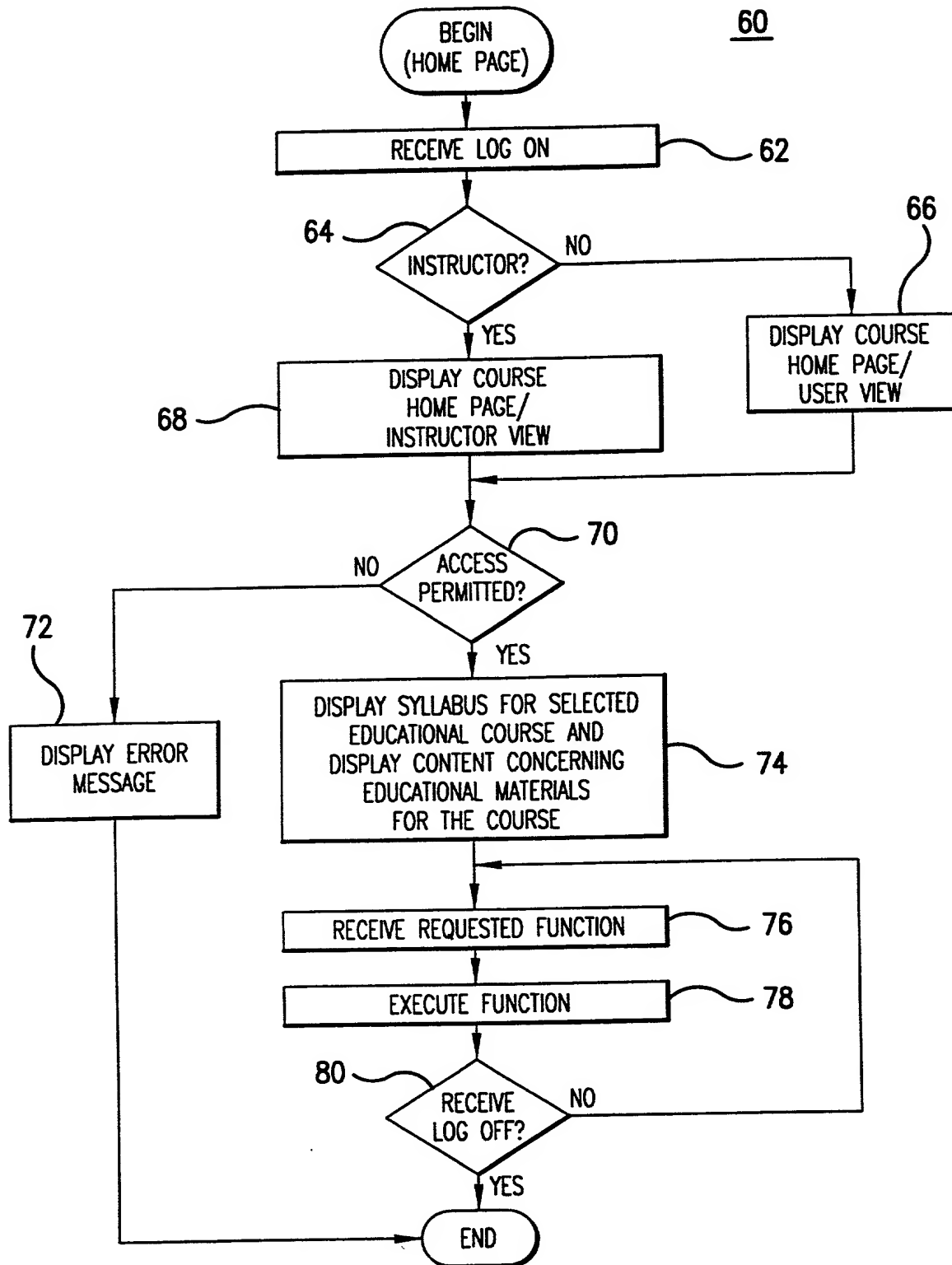


FIG. 1A

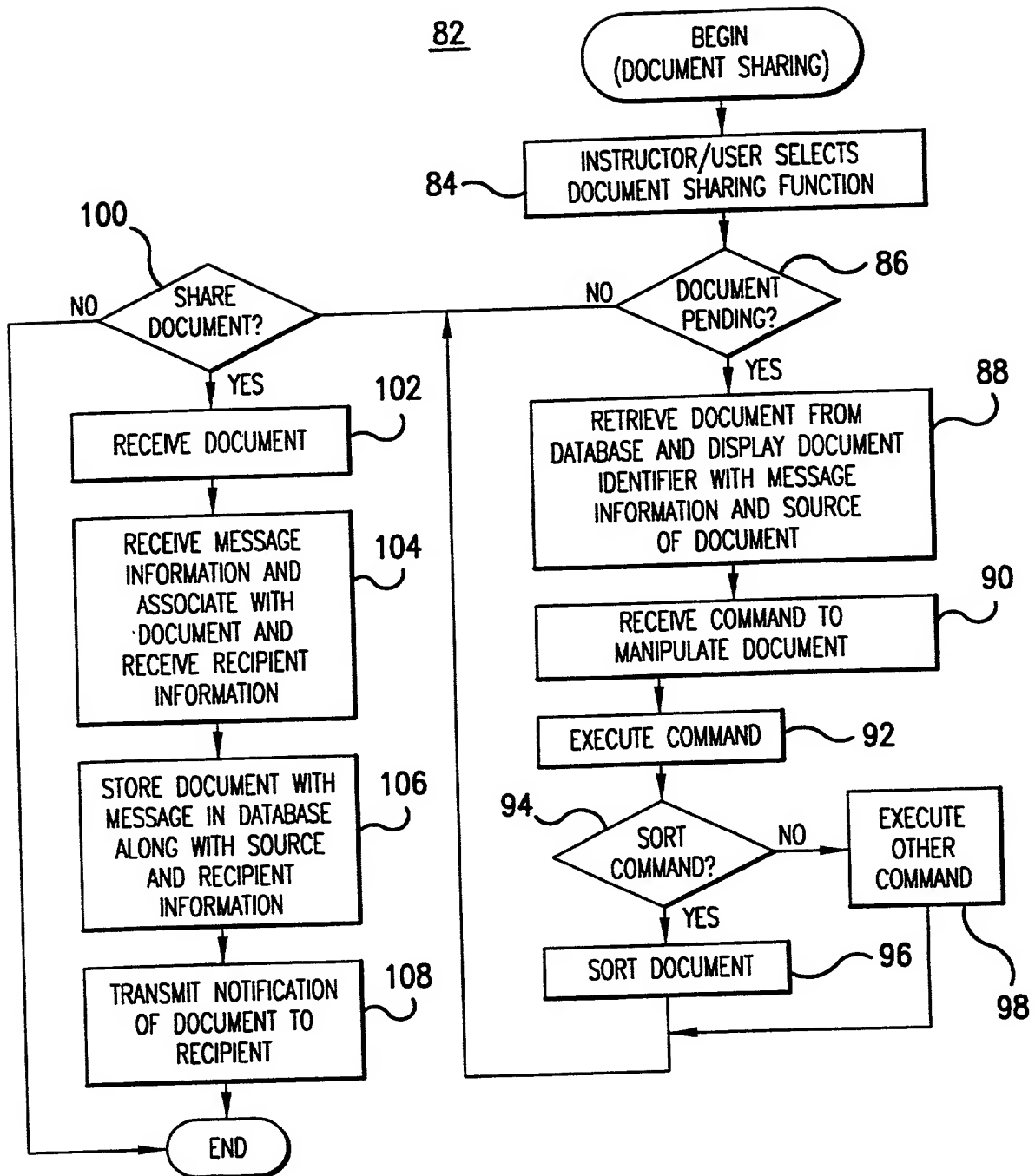


FIG. 1B

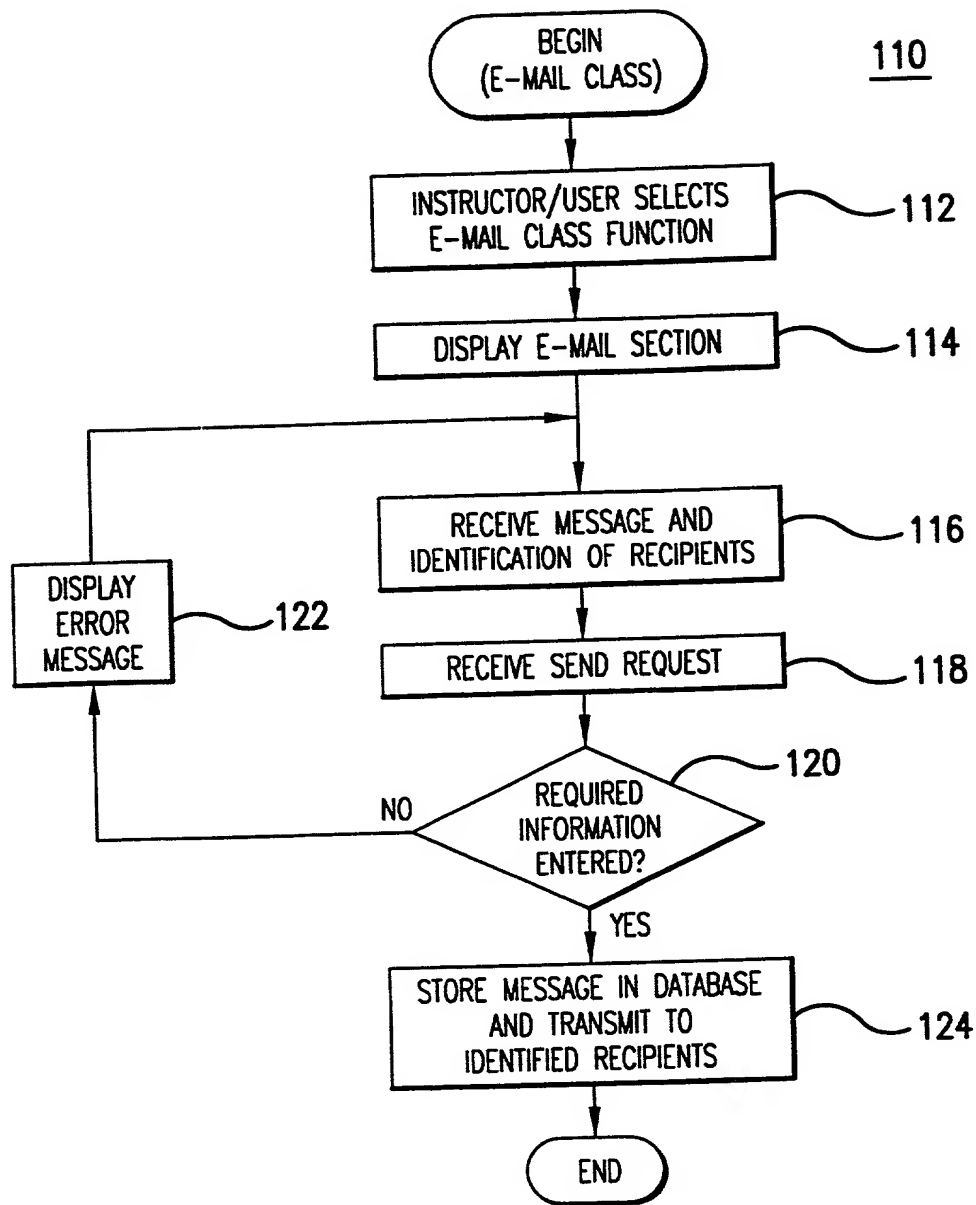


FIG. 1C

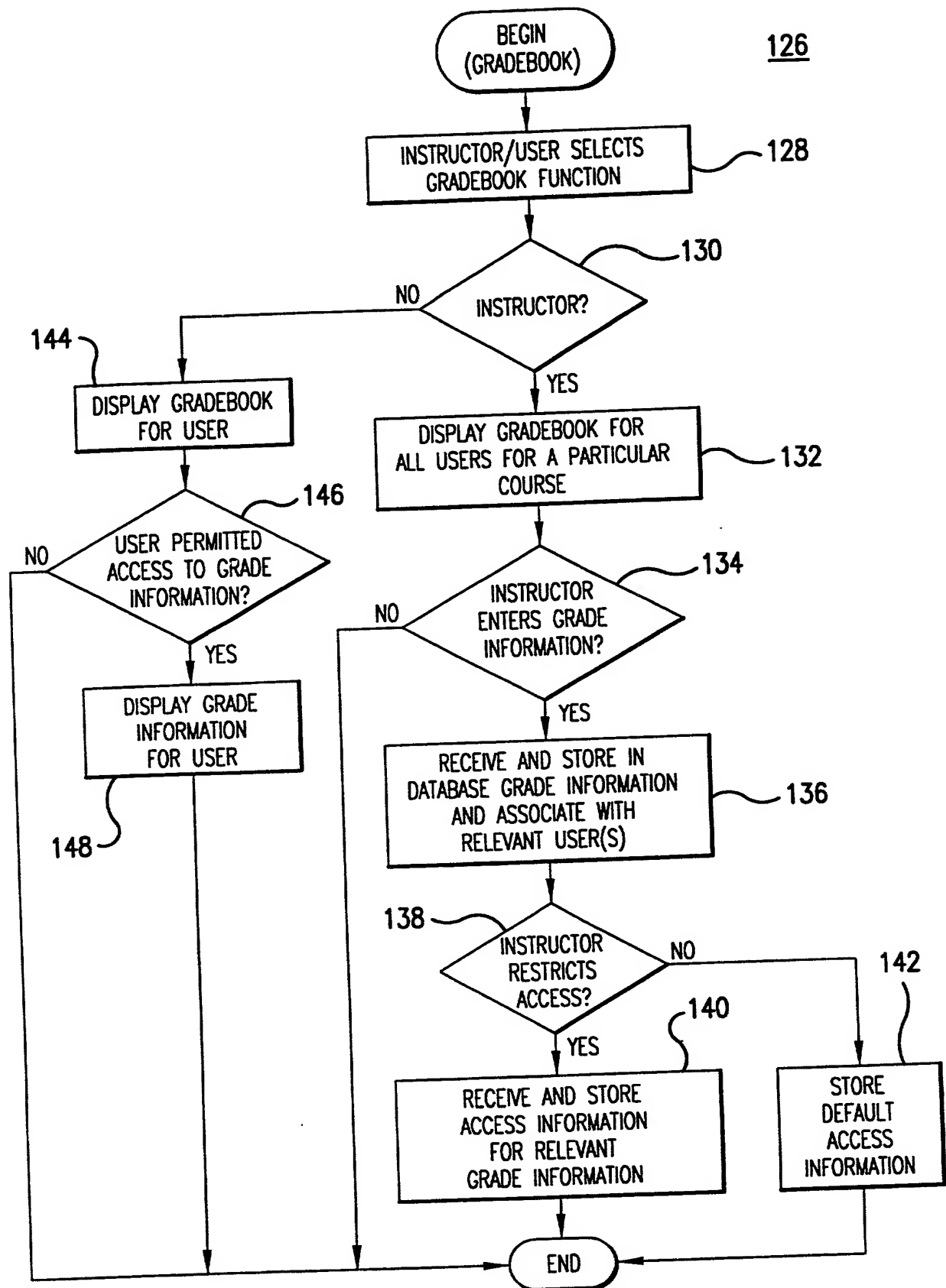


FIG. 1D

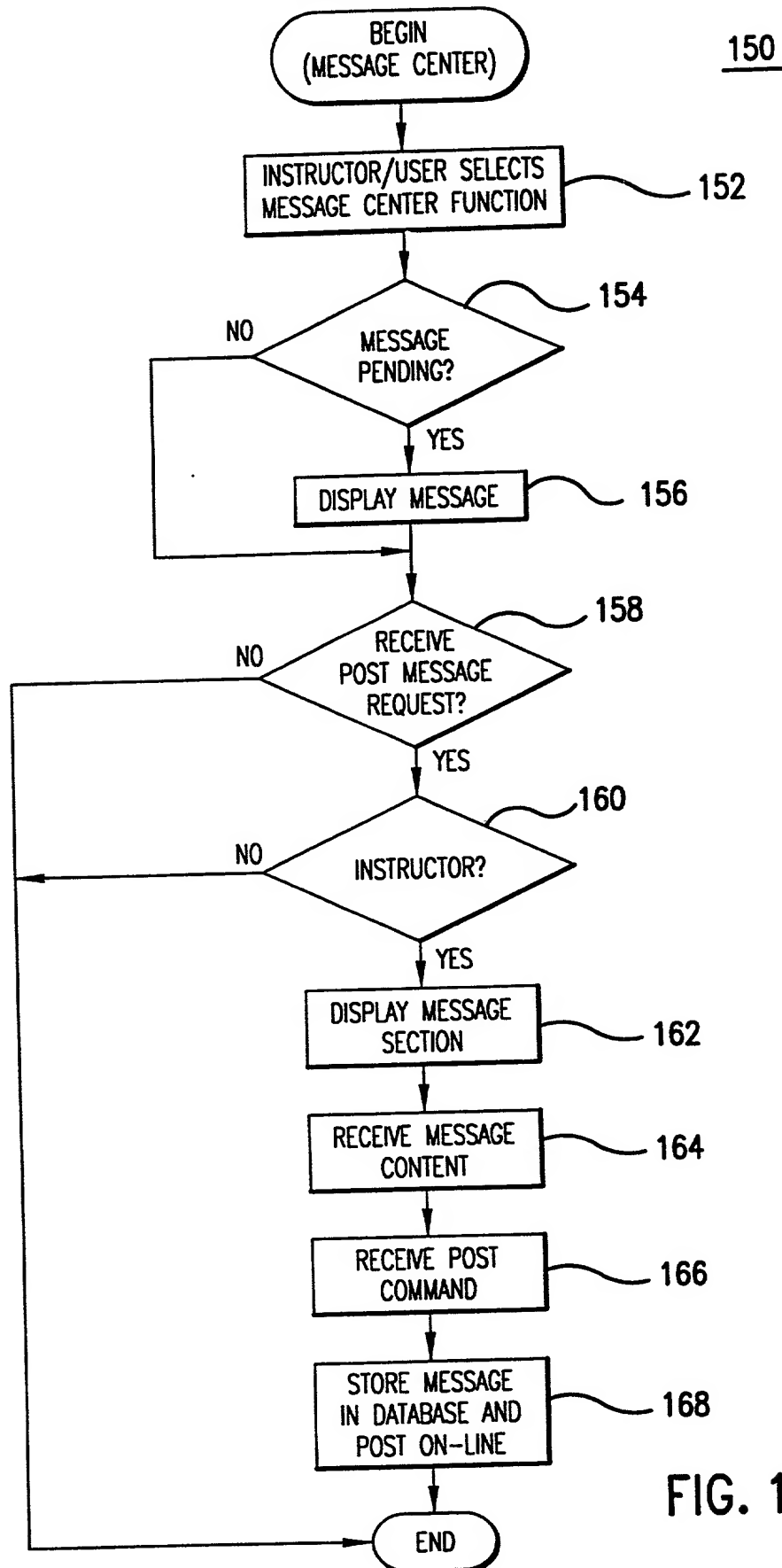


FIG. 1E

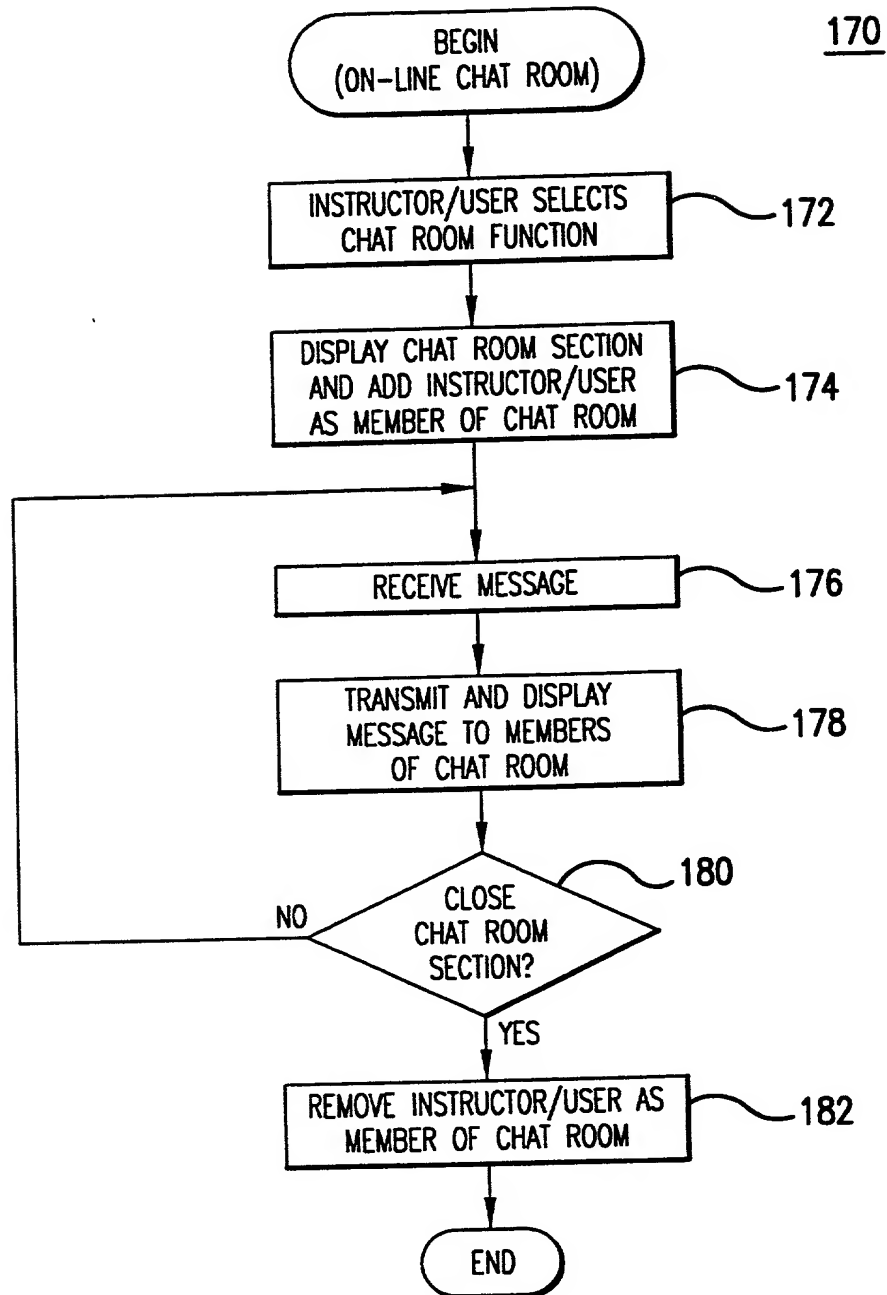
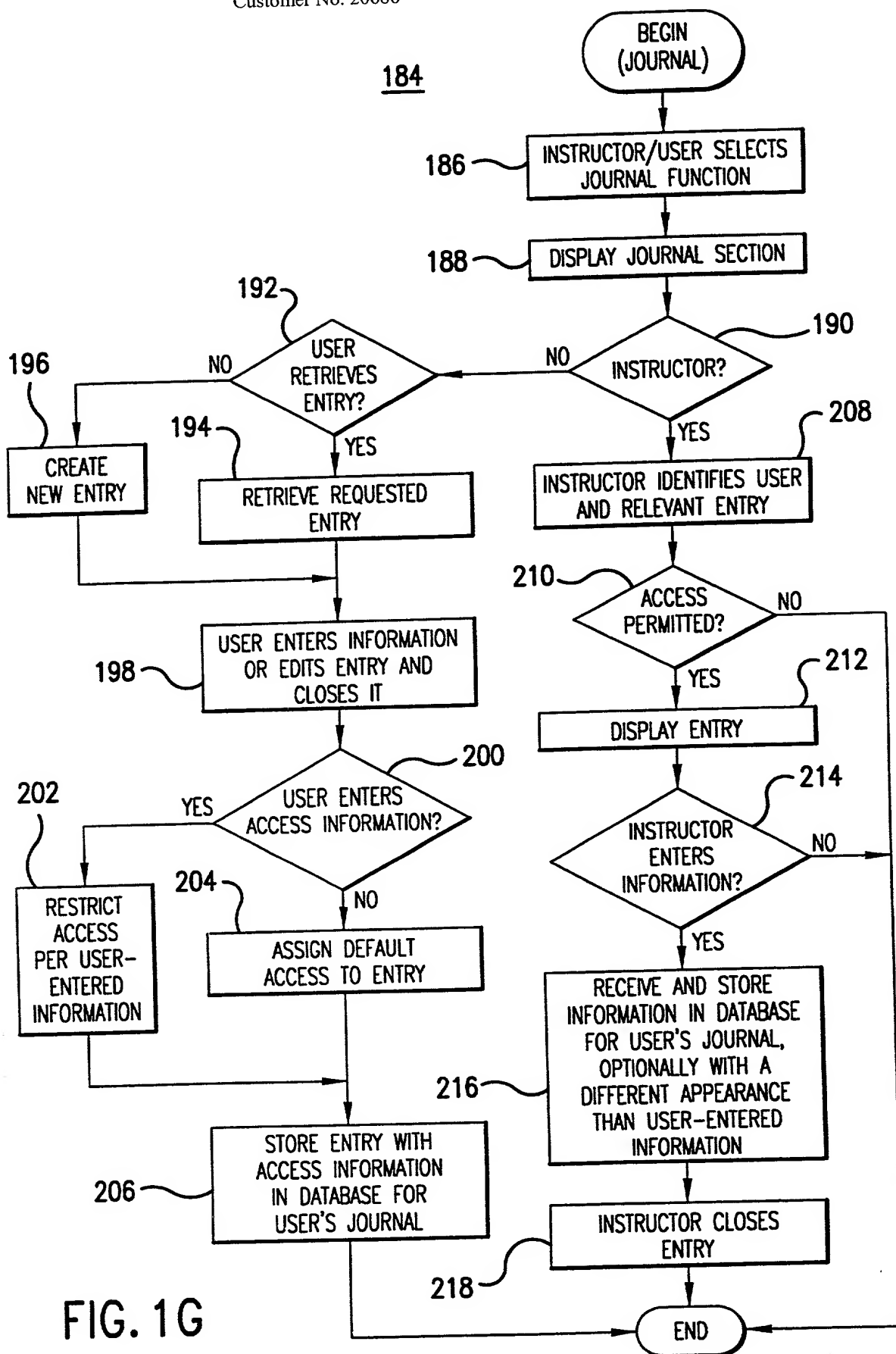


FIG. 1F



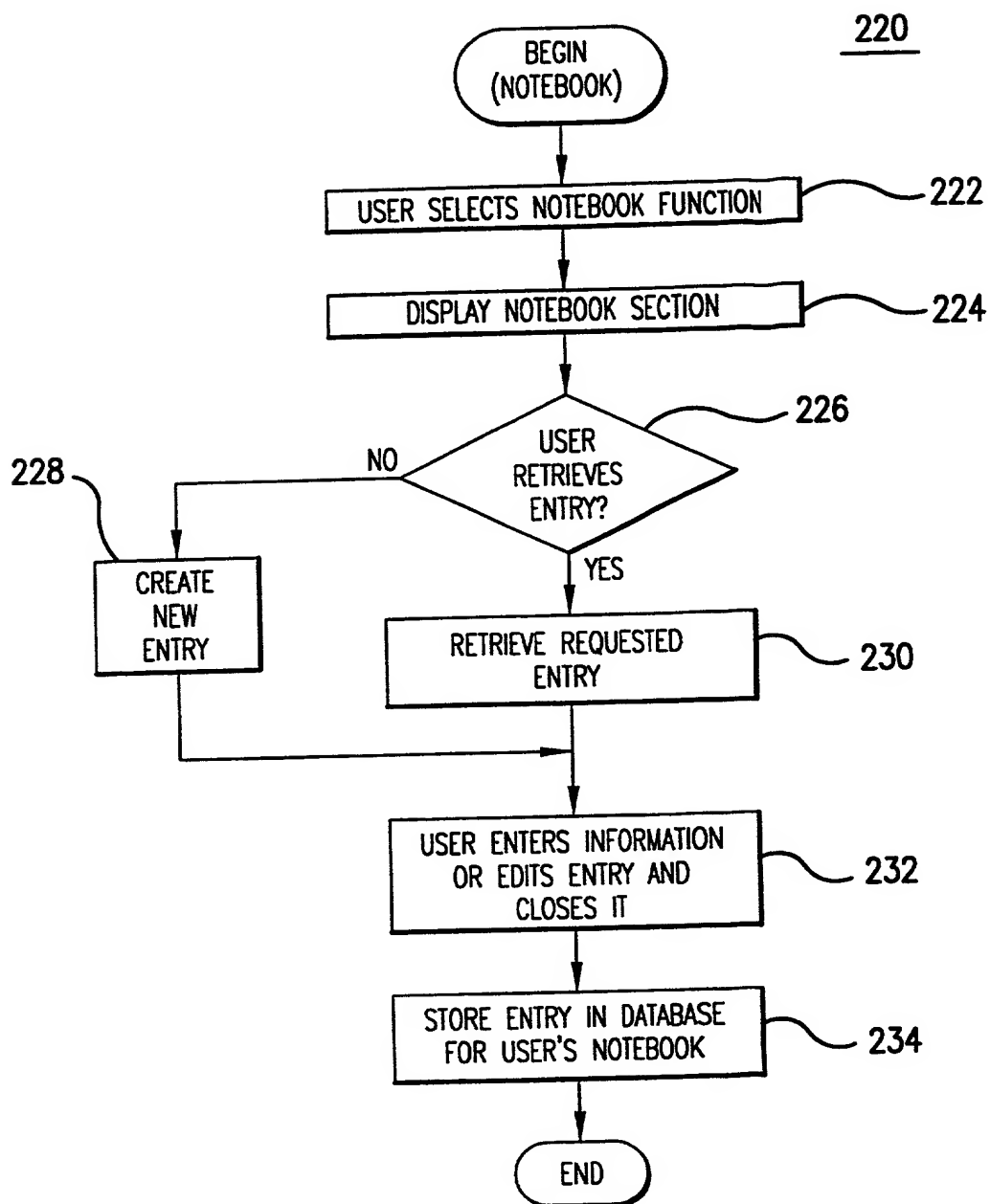


FIG. 1H

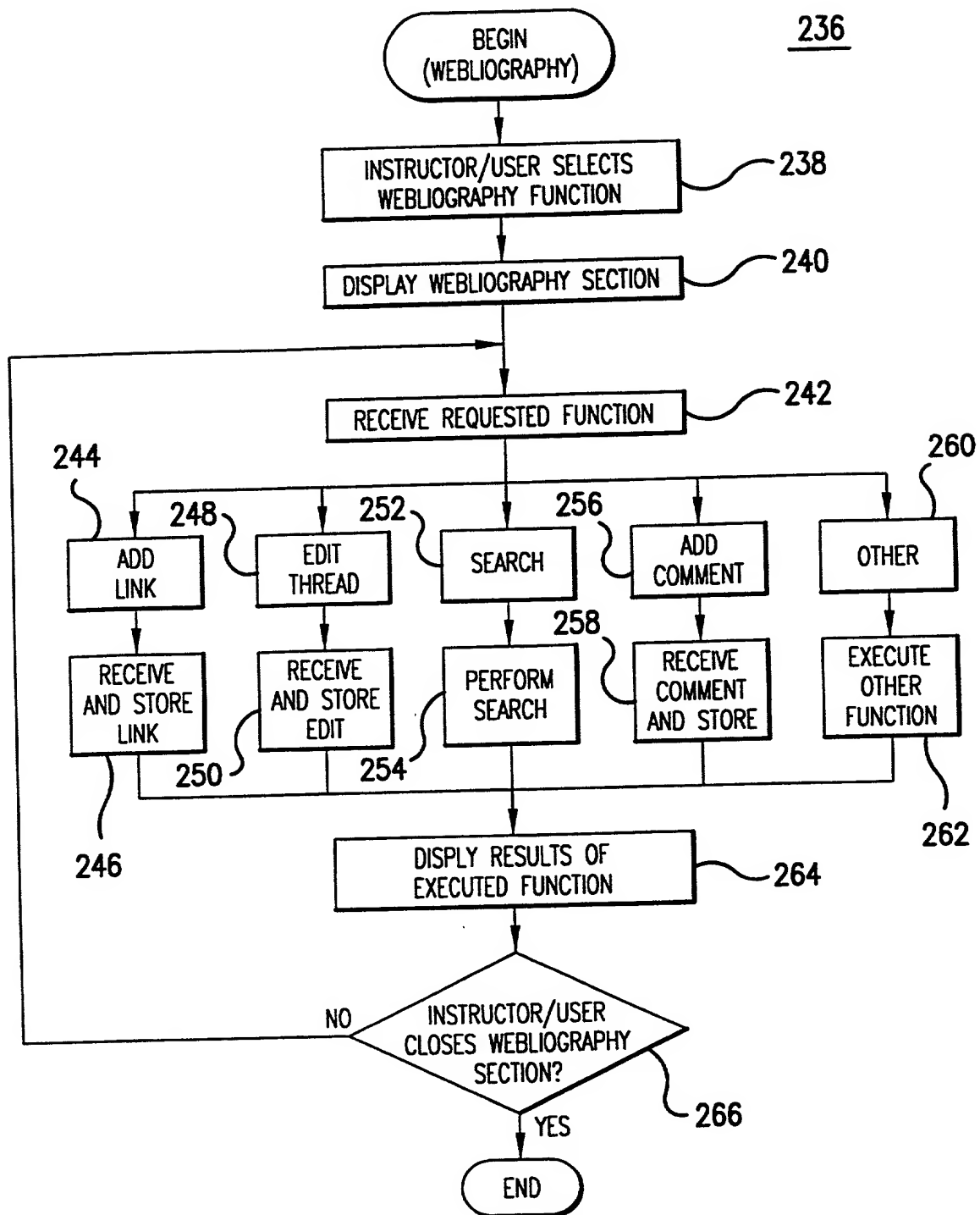


FIG. 11

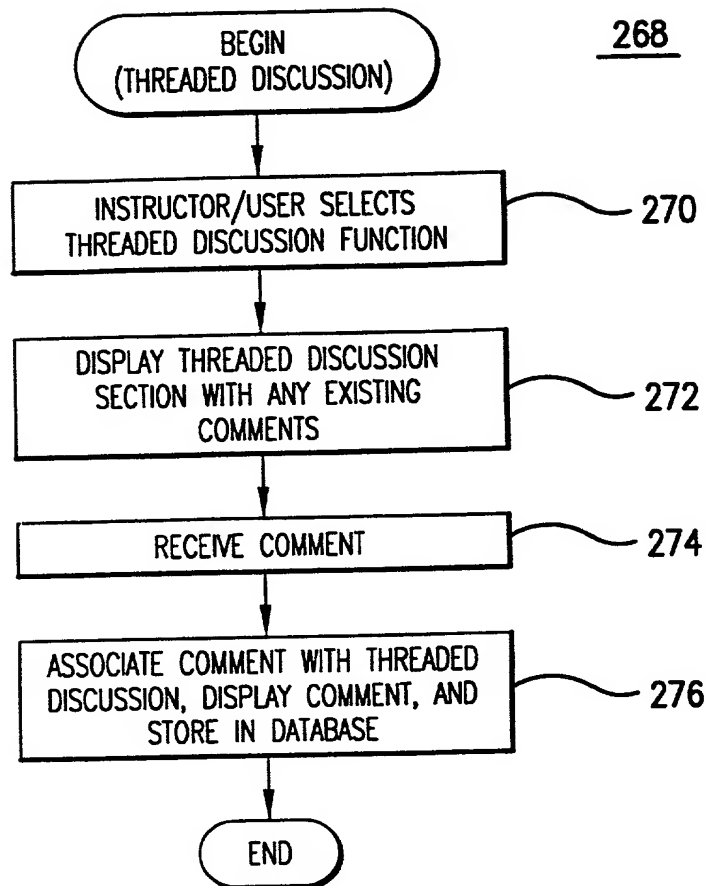


FIG. 1J

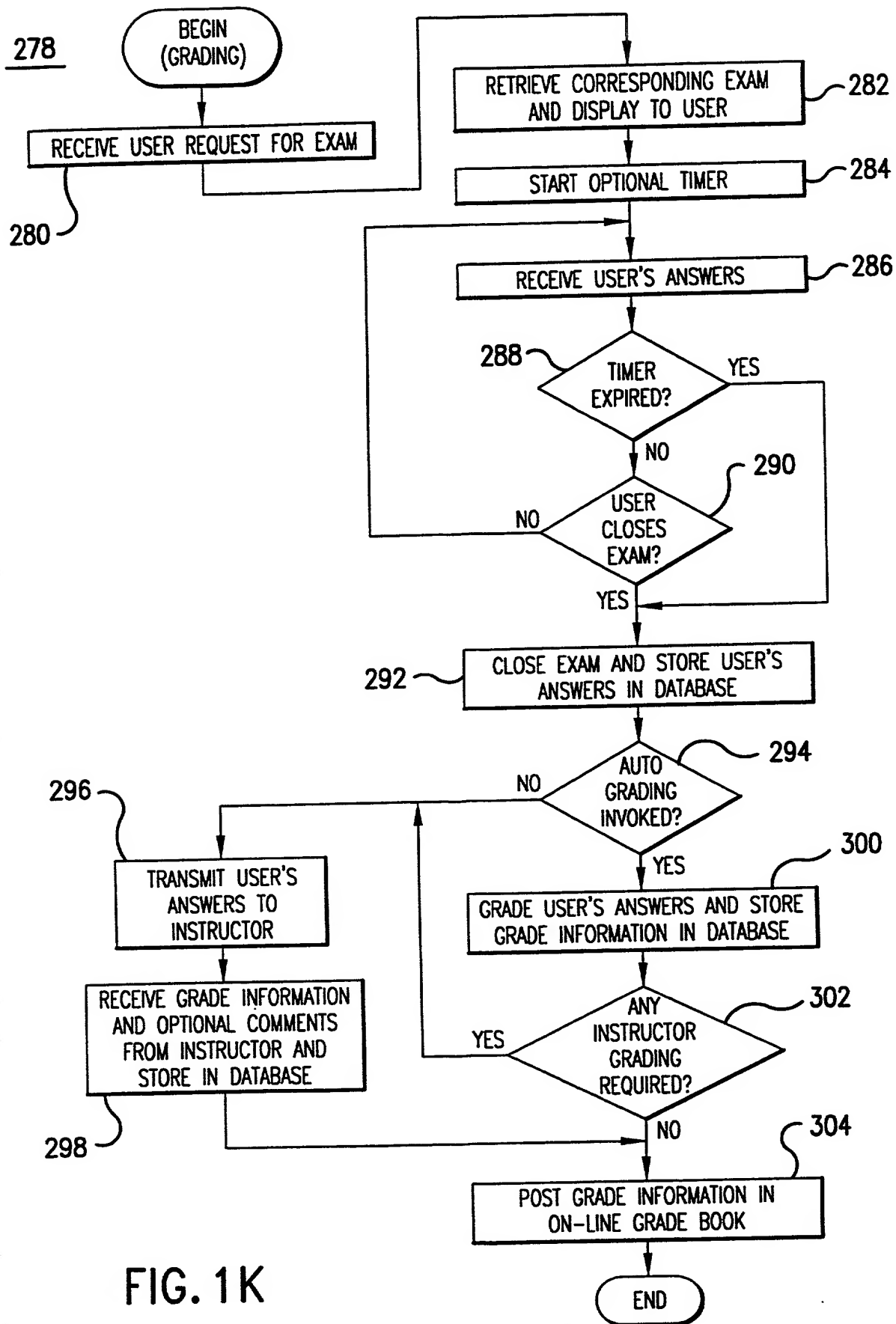
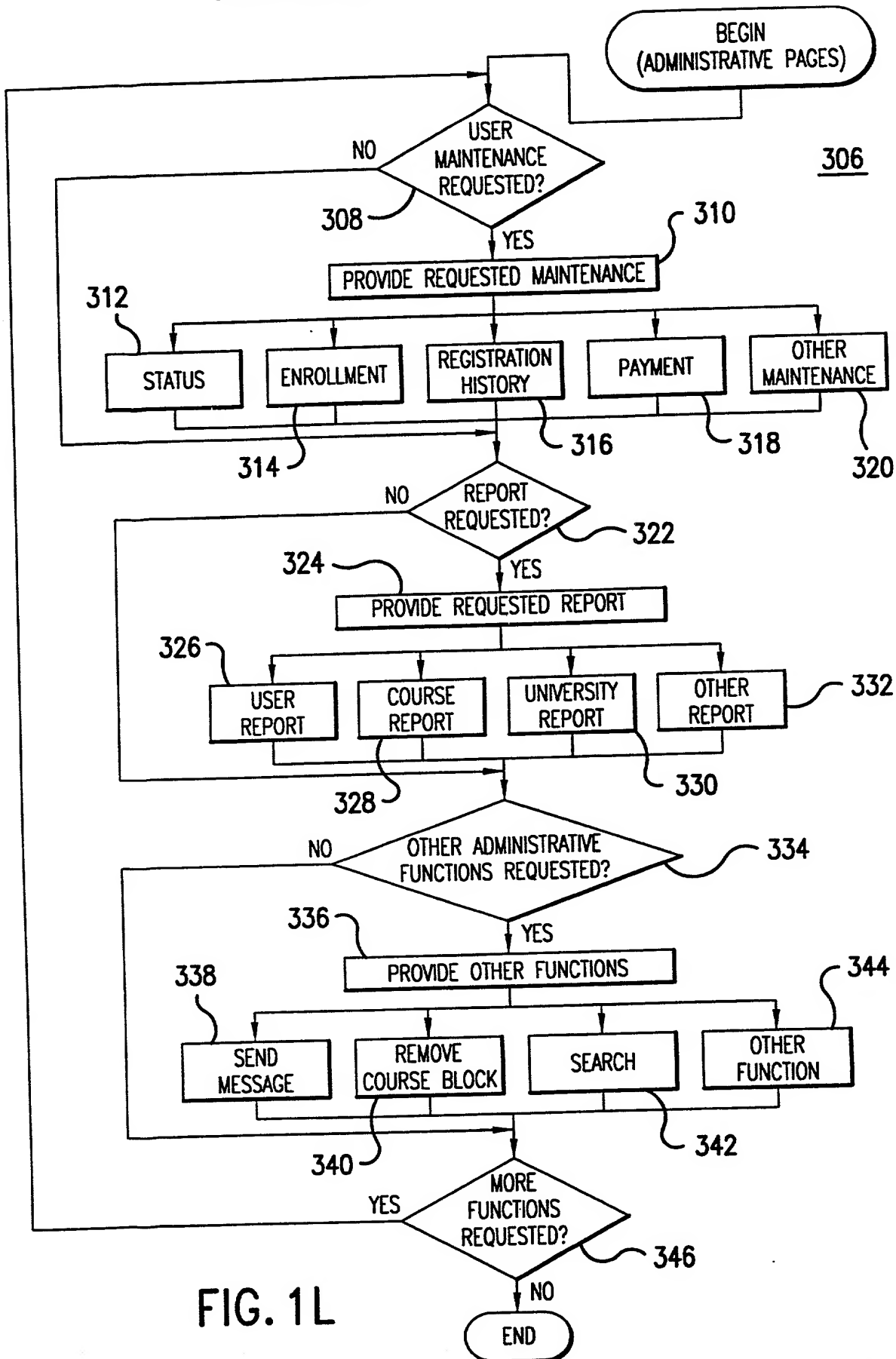


FIG. 1K



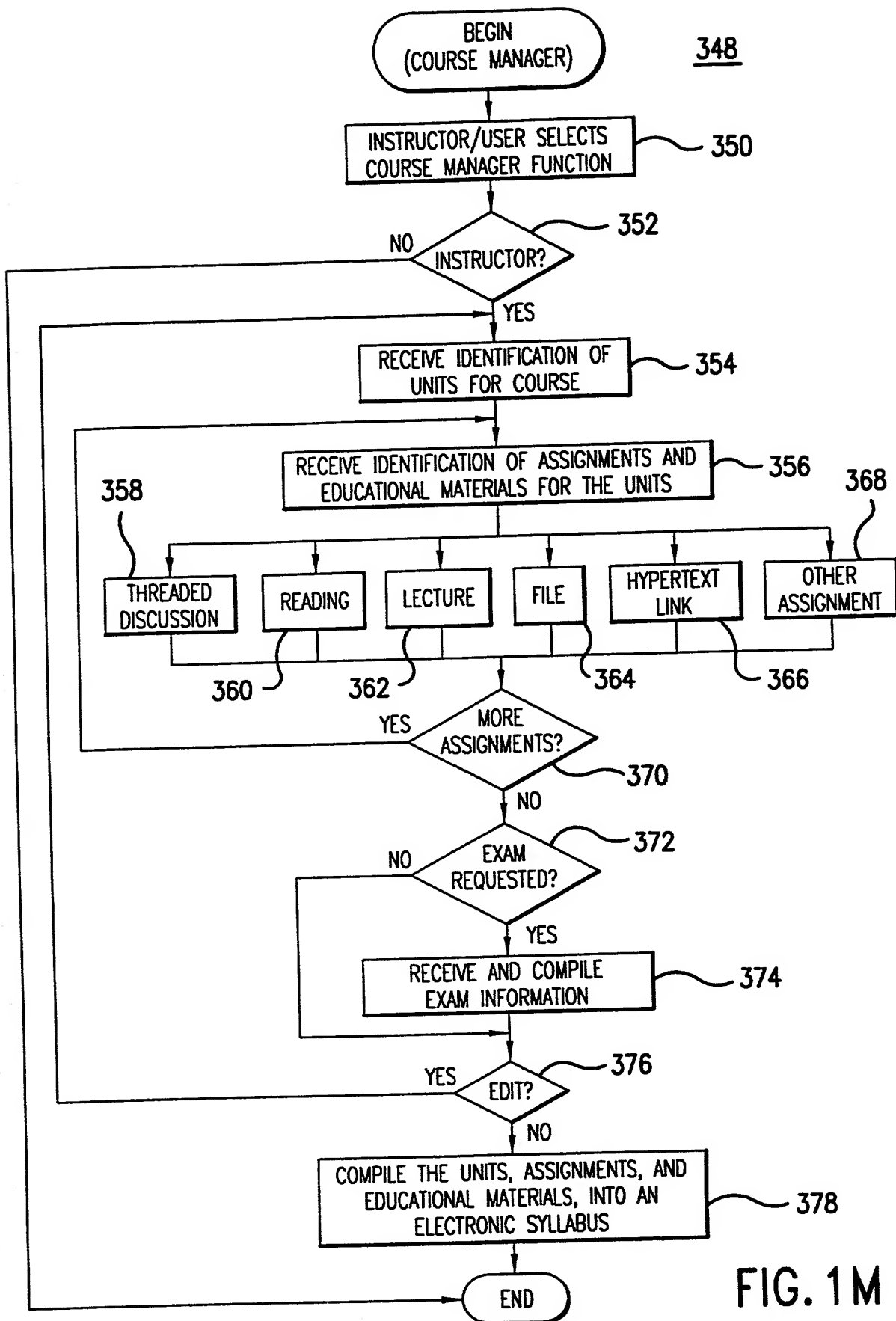


FIG. 1M

500

FIG.2A	FIG.2B	FIG.2C	FIG.2D	FIG.2E	FIG.2F
FIG.2G	FIG.2H	FIG.2I	FIG.2J	FIG.2K	FIG.2L
FIG.2M	FIG.2N	FIG.2O	FIG.2P	FIG.2Q	FIG.2R

FIG.2

FIG.2A

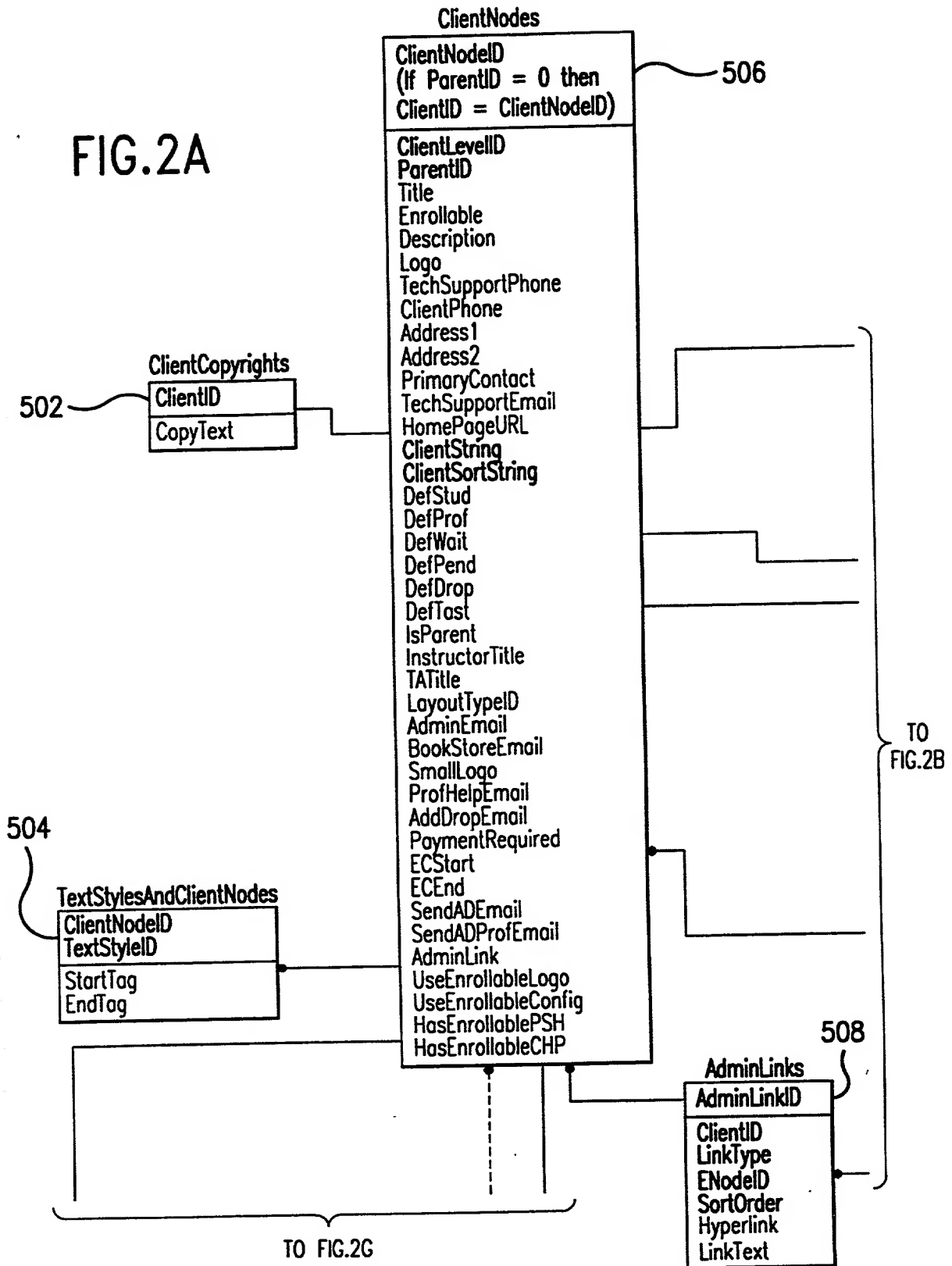
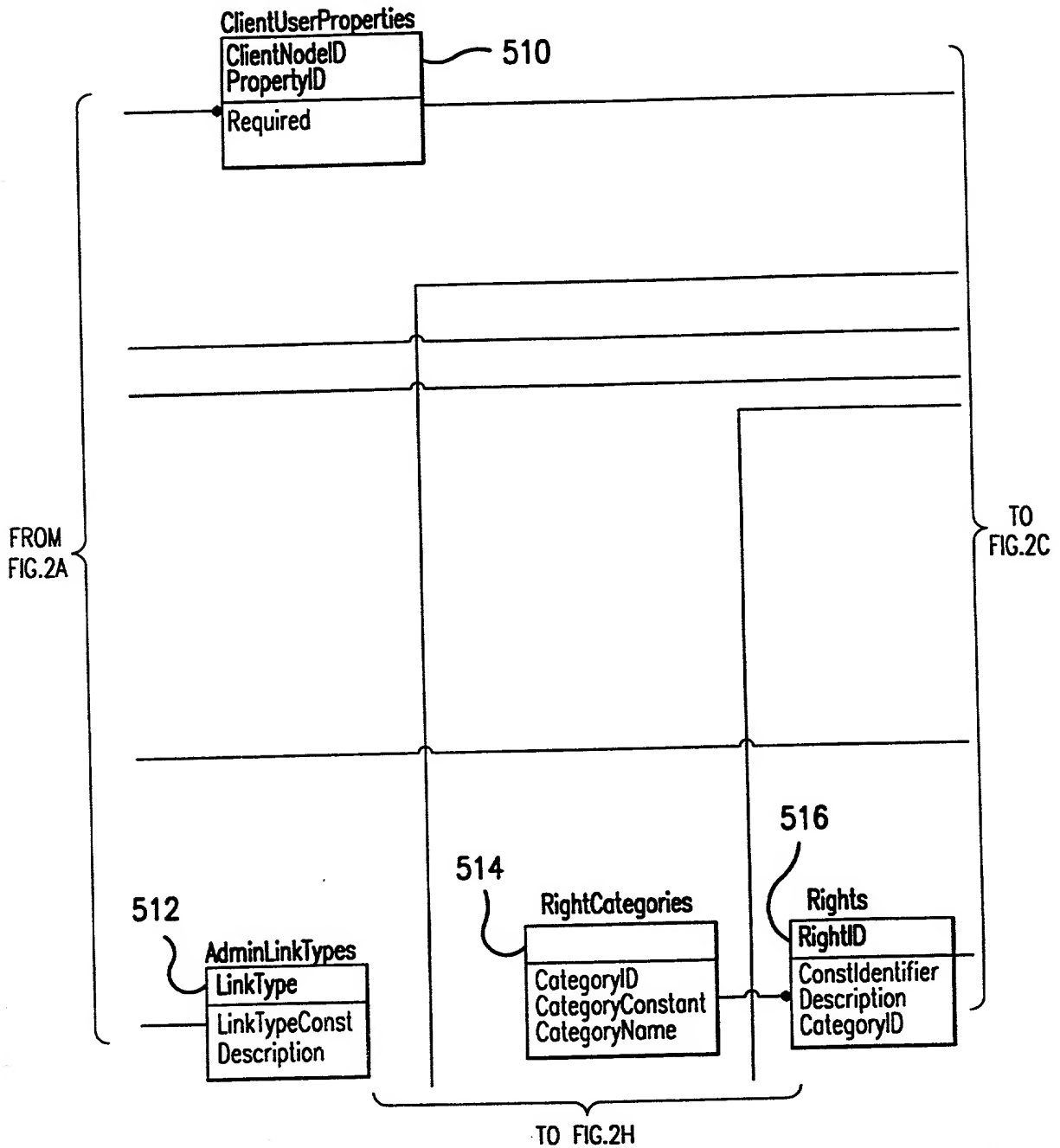
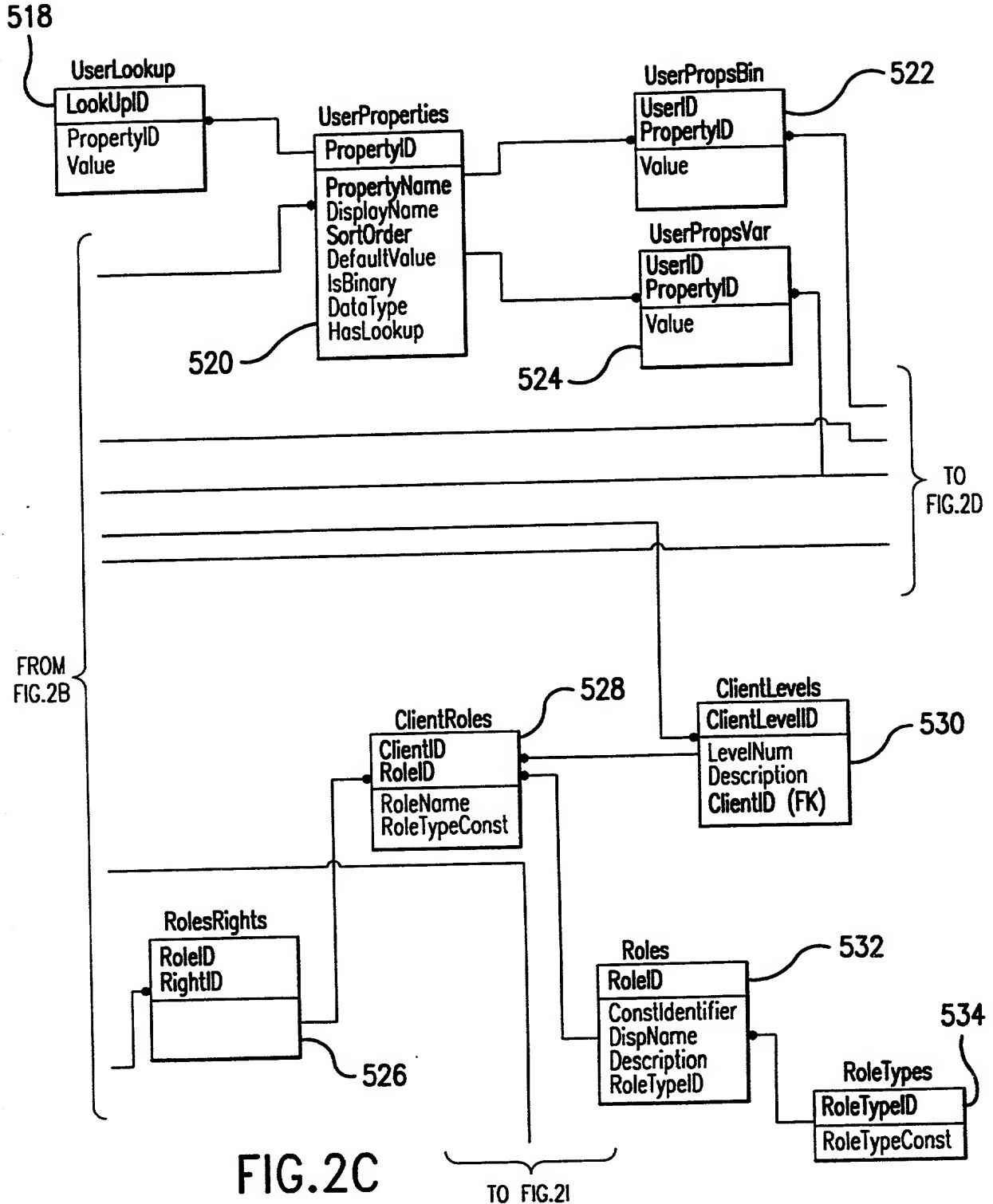


FIG.2B





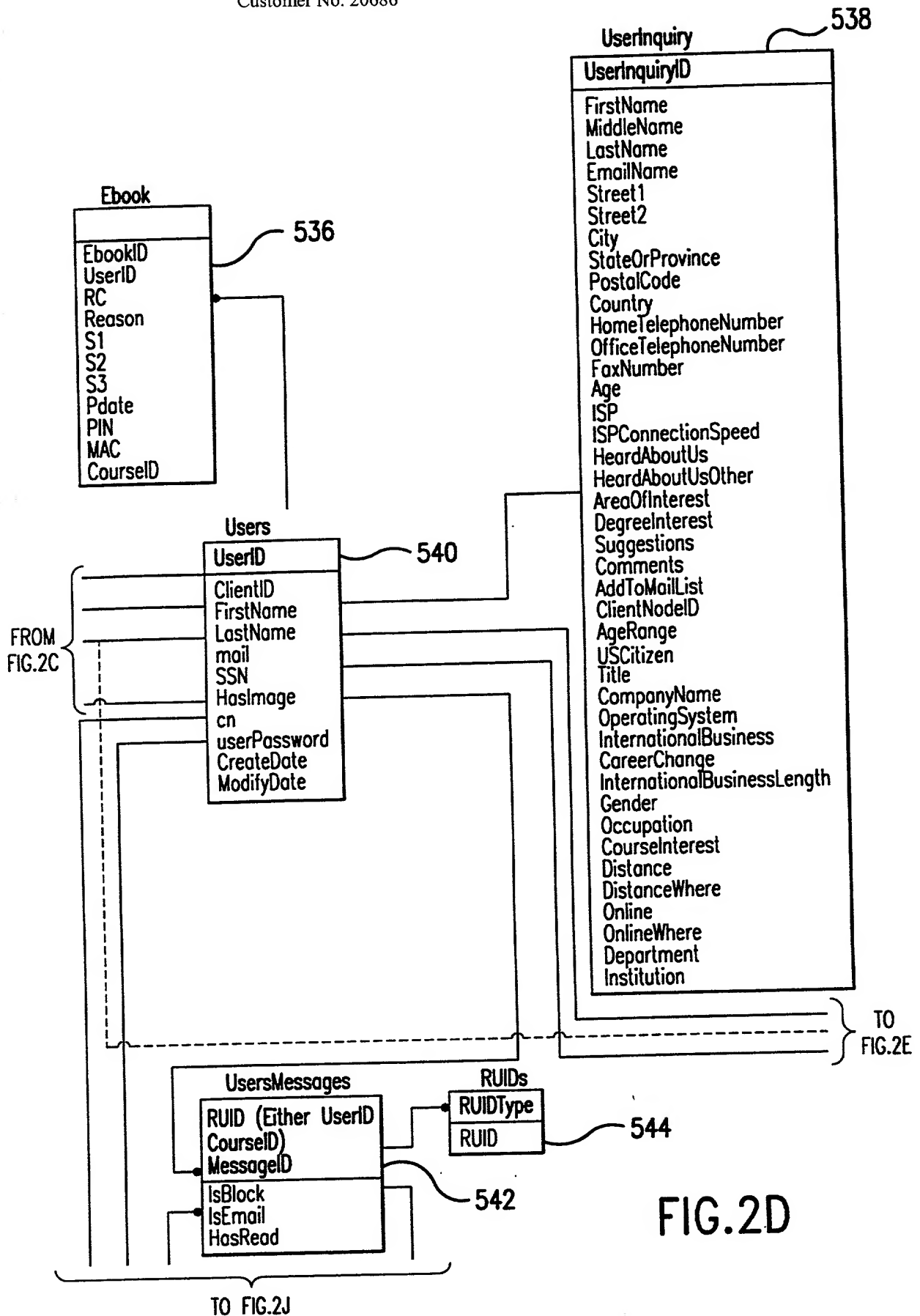


FIG.2D

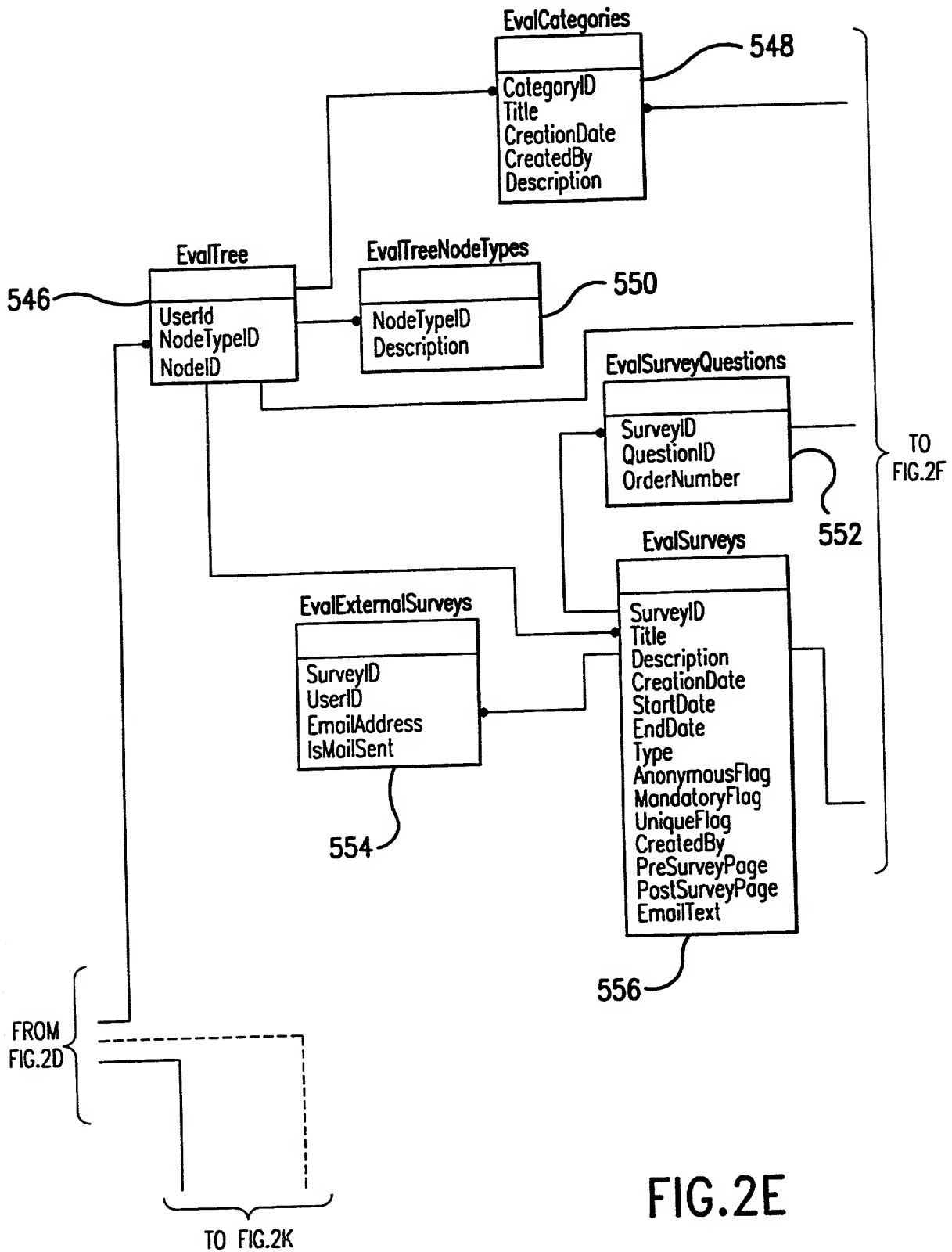


FIG. 2E

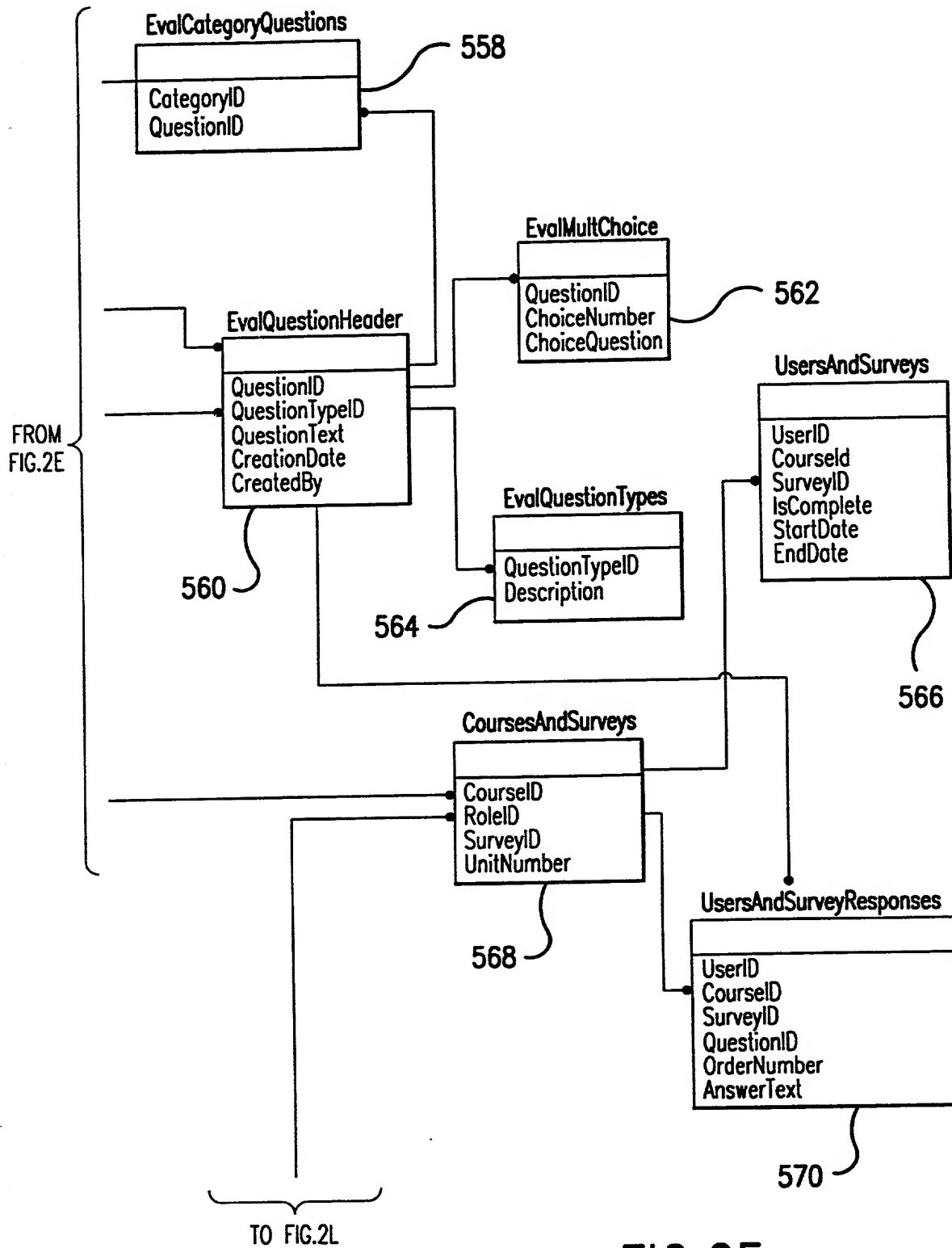
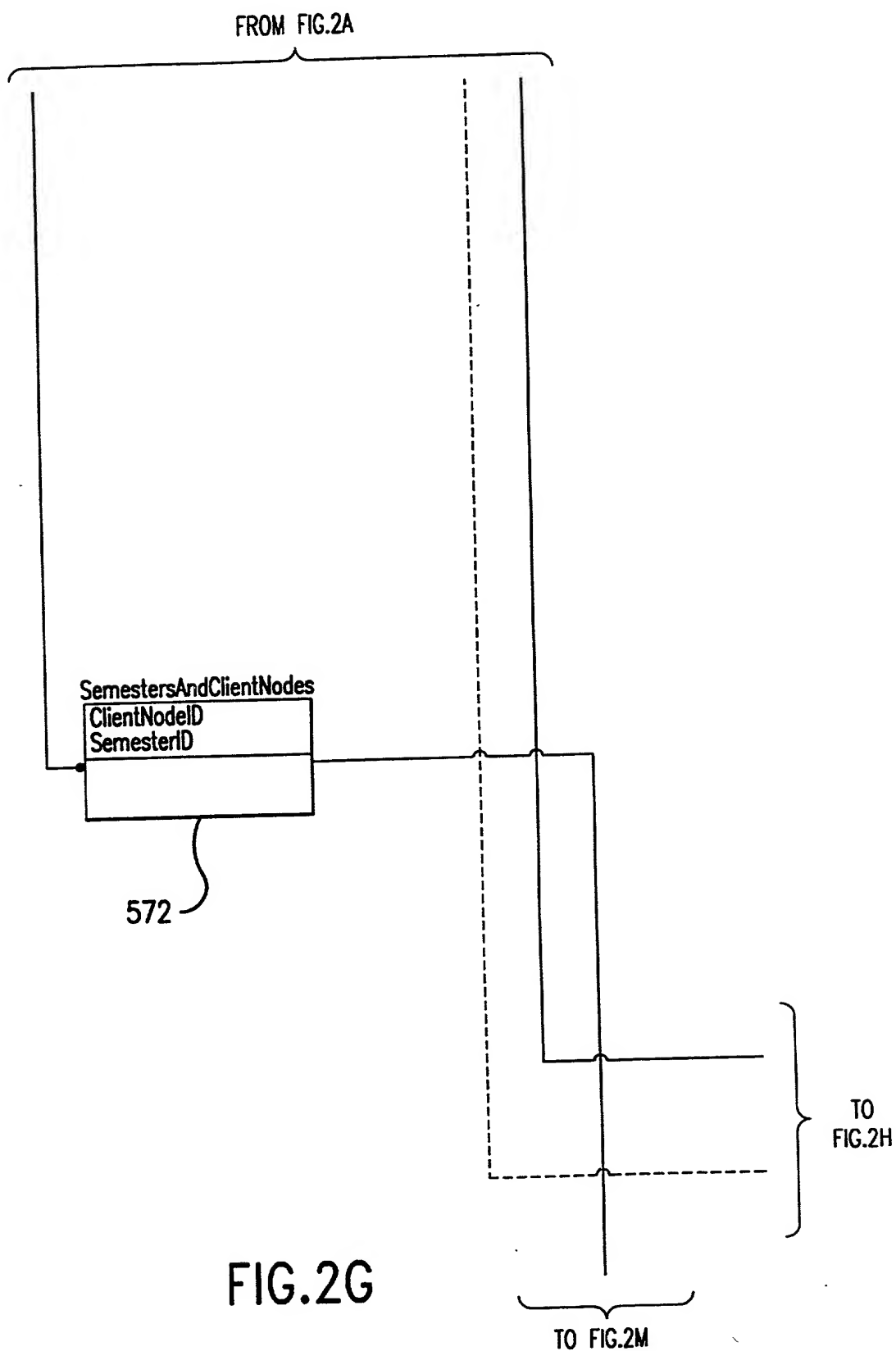


FIG.2F



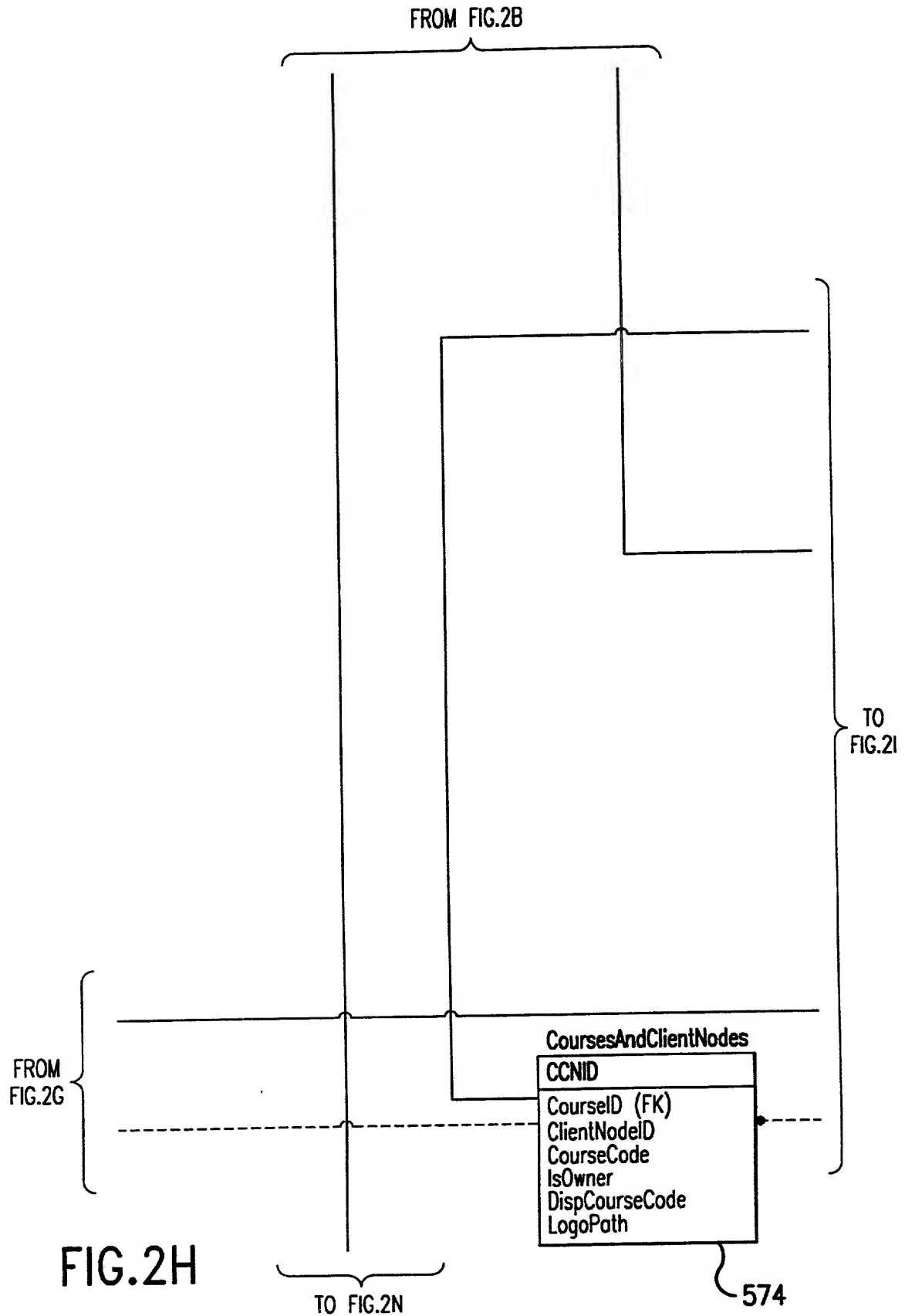


FIG.2H

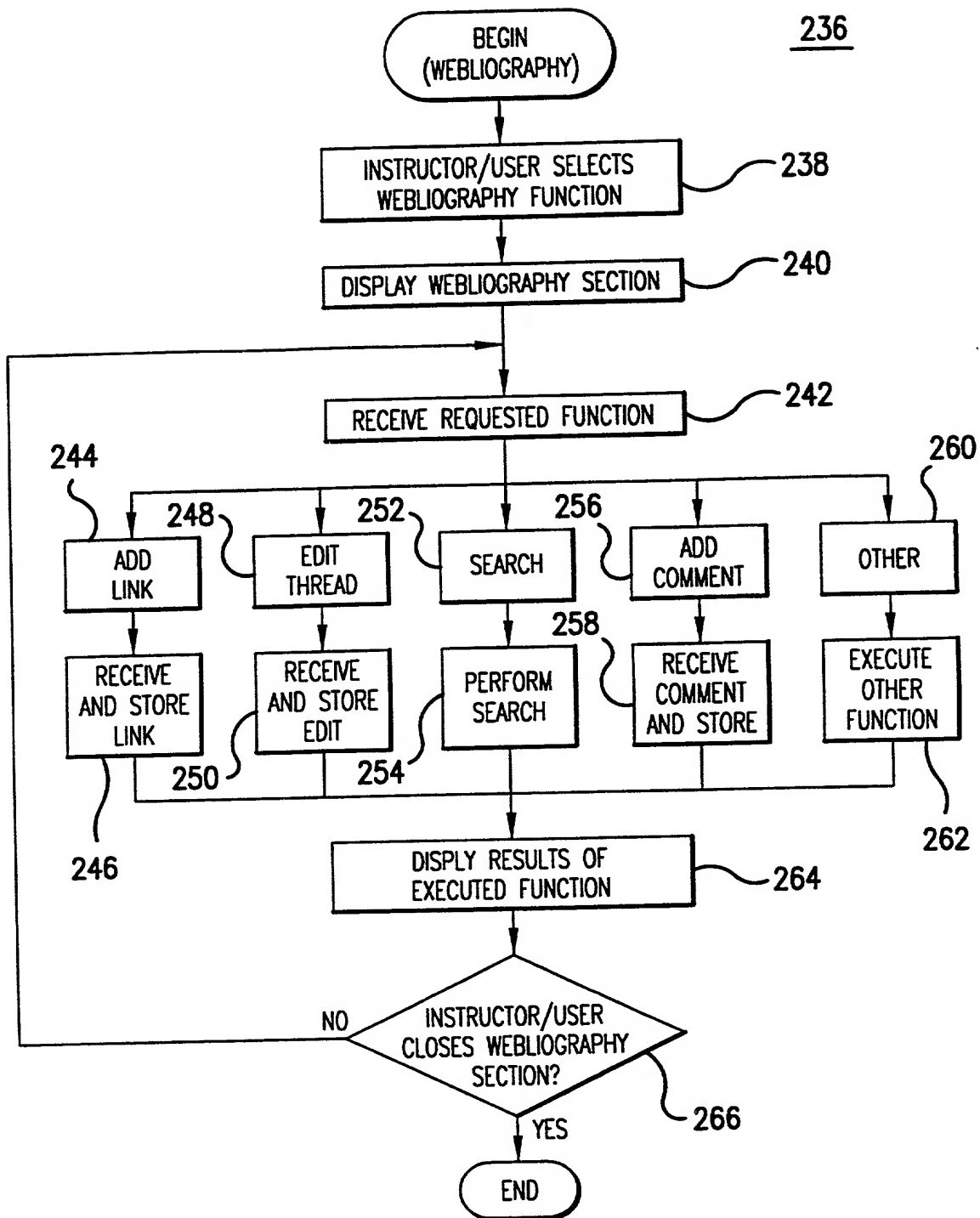


FIG. 11

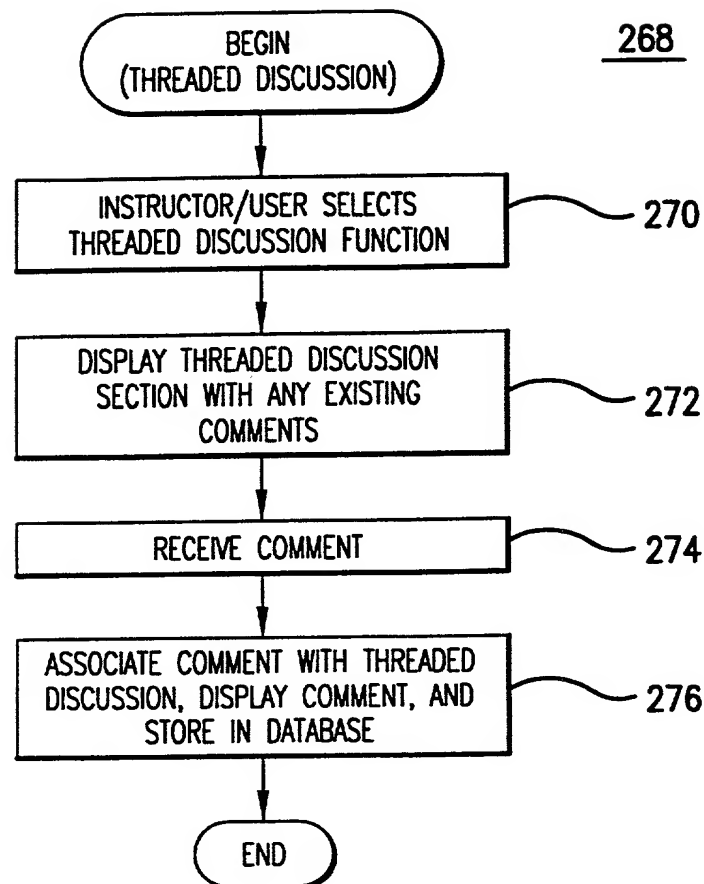


FIG. 1J

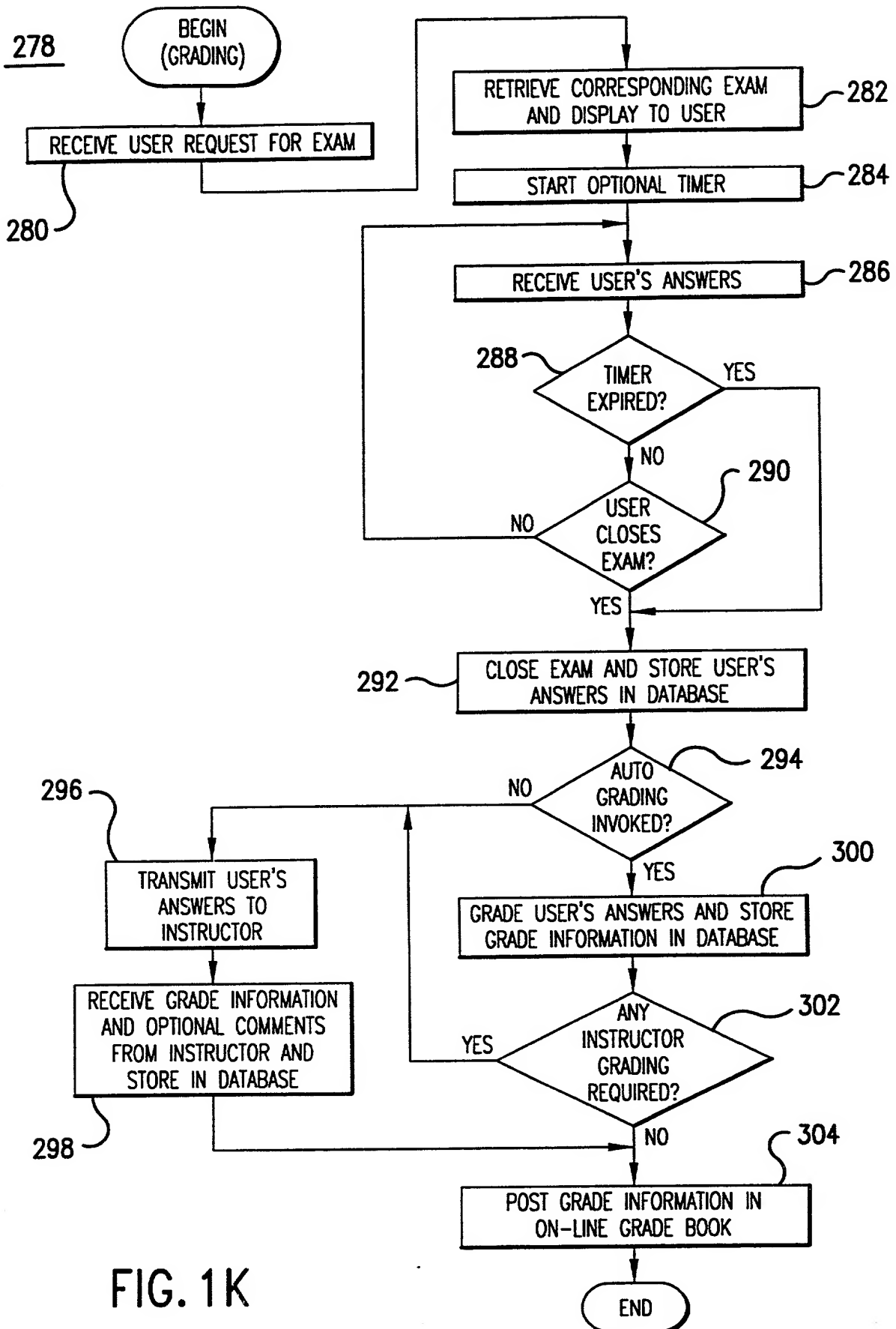
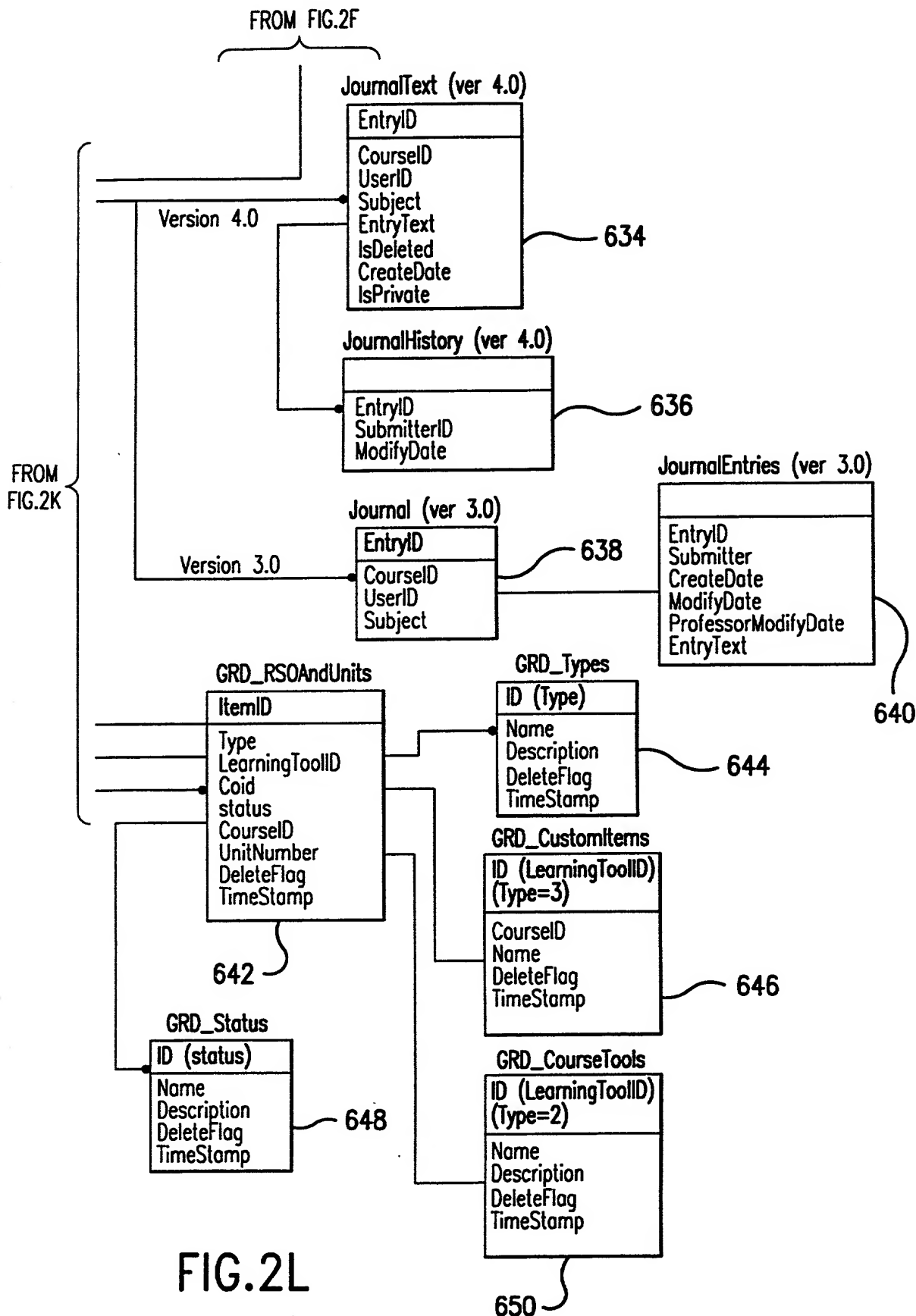
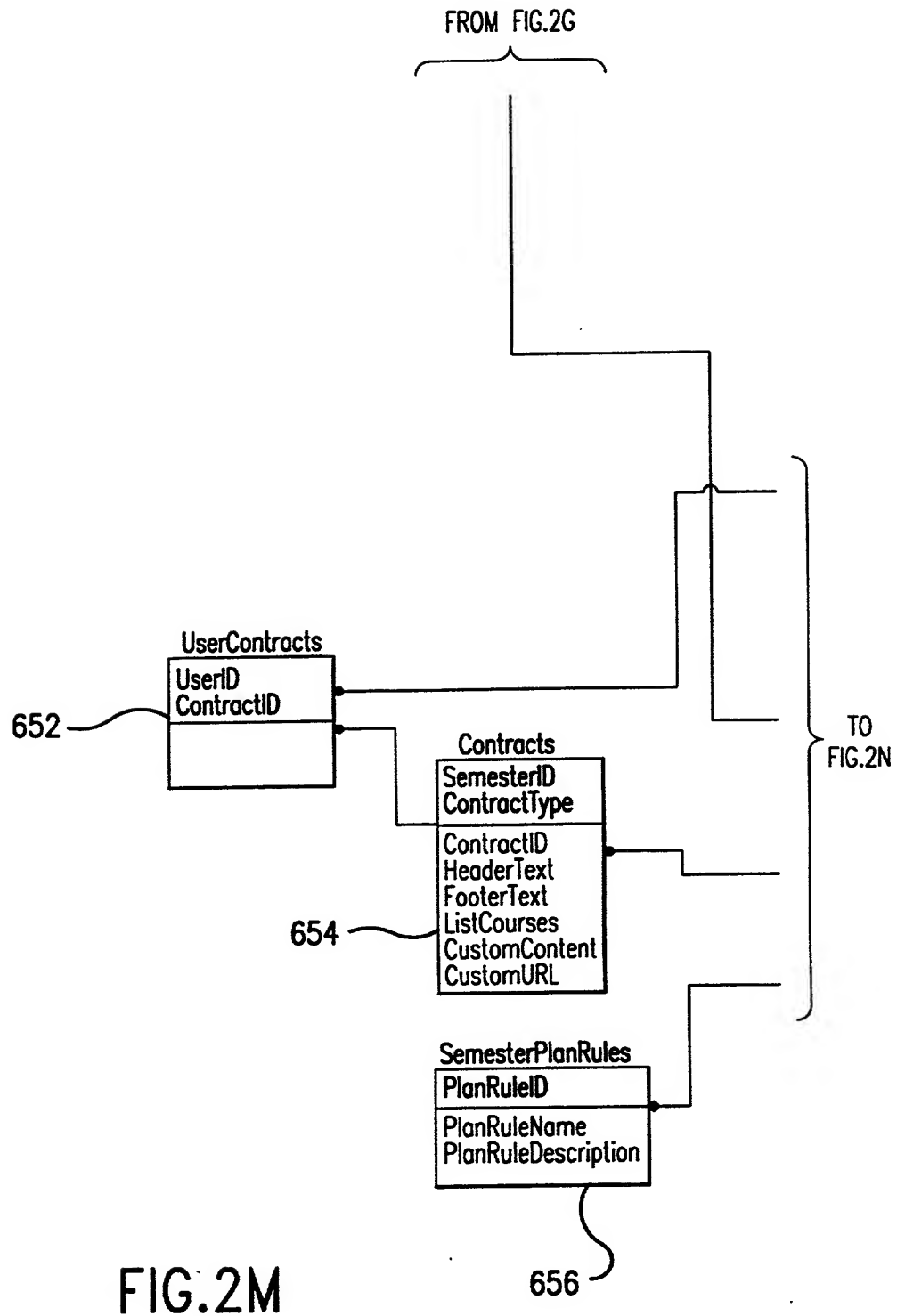
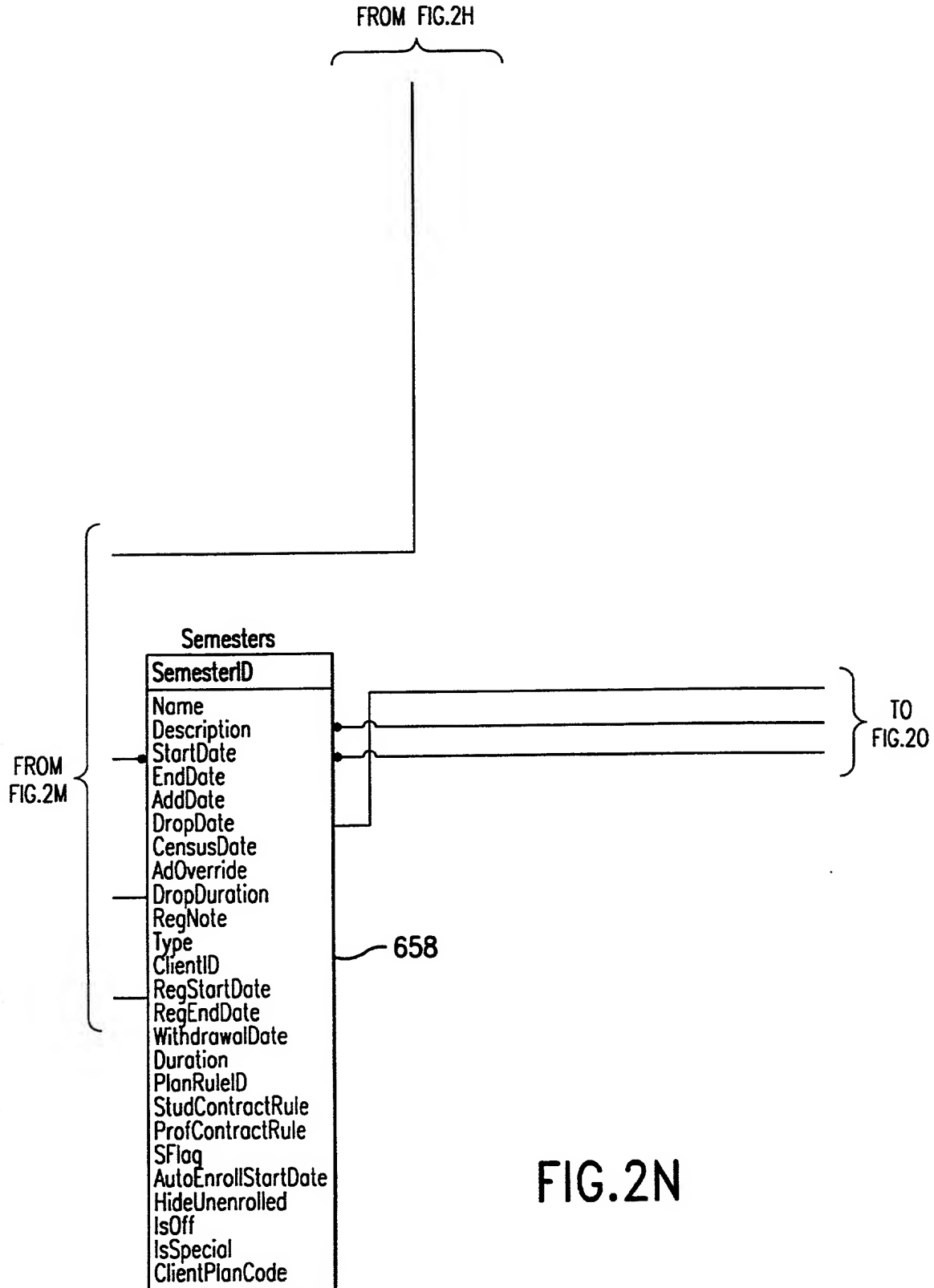


FIG. 1K







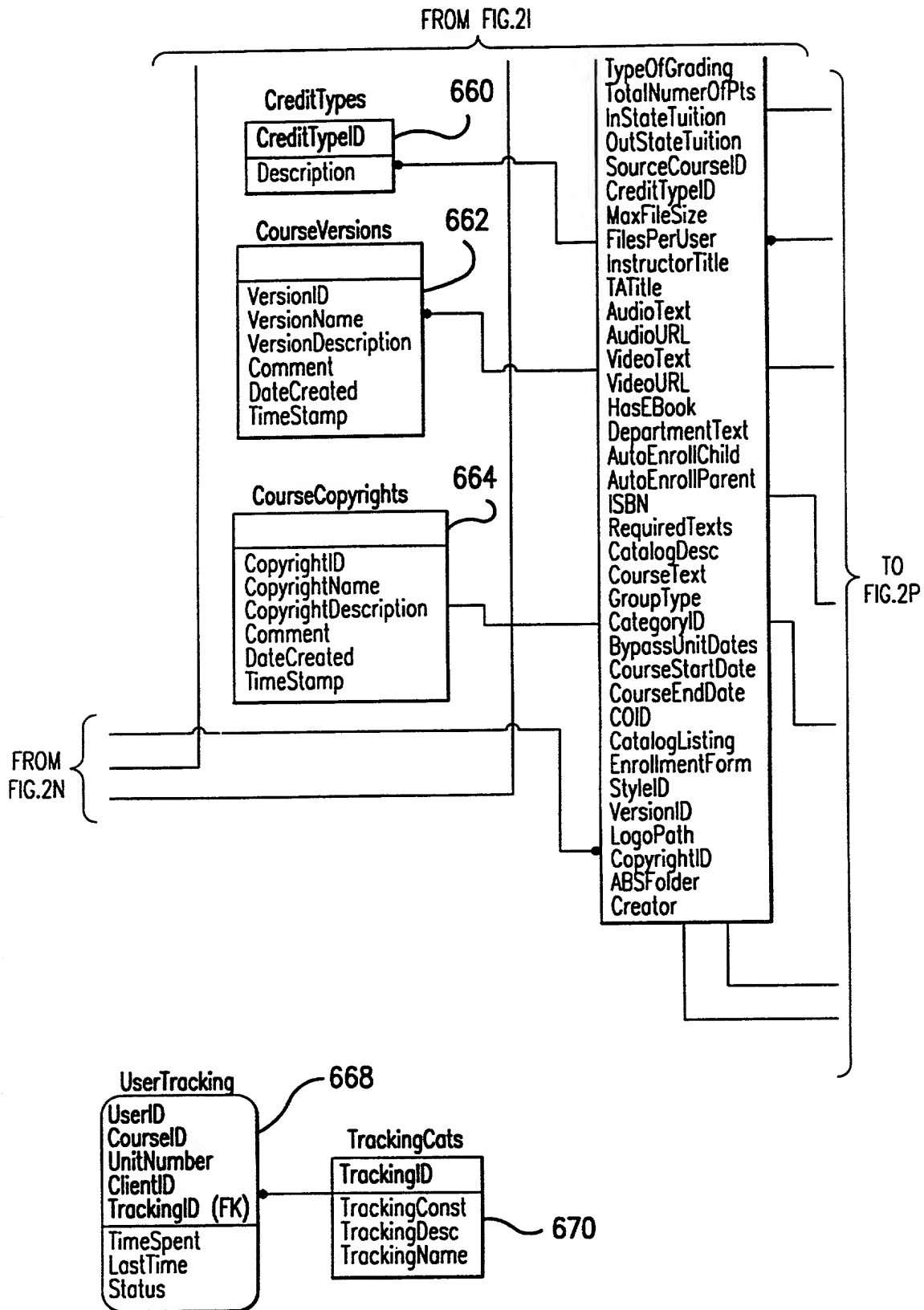
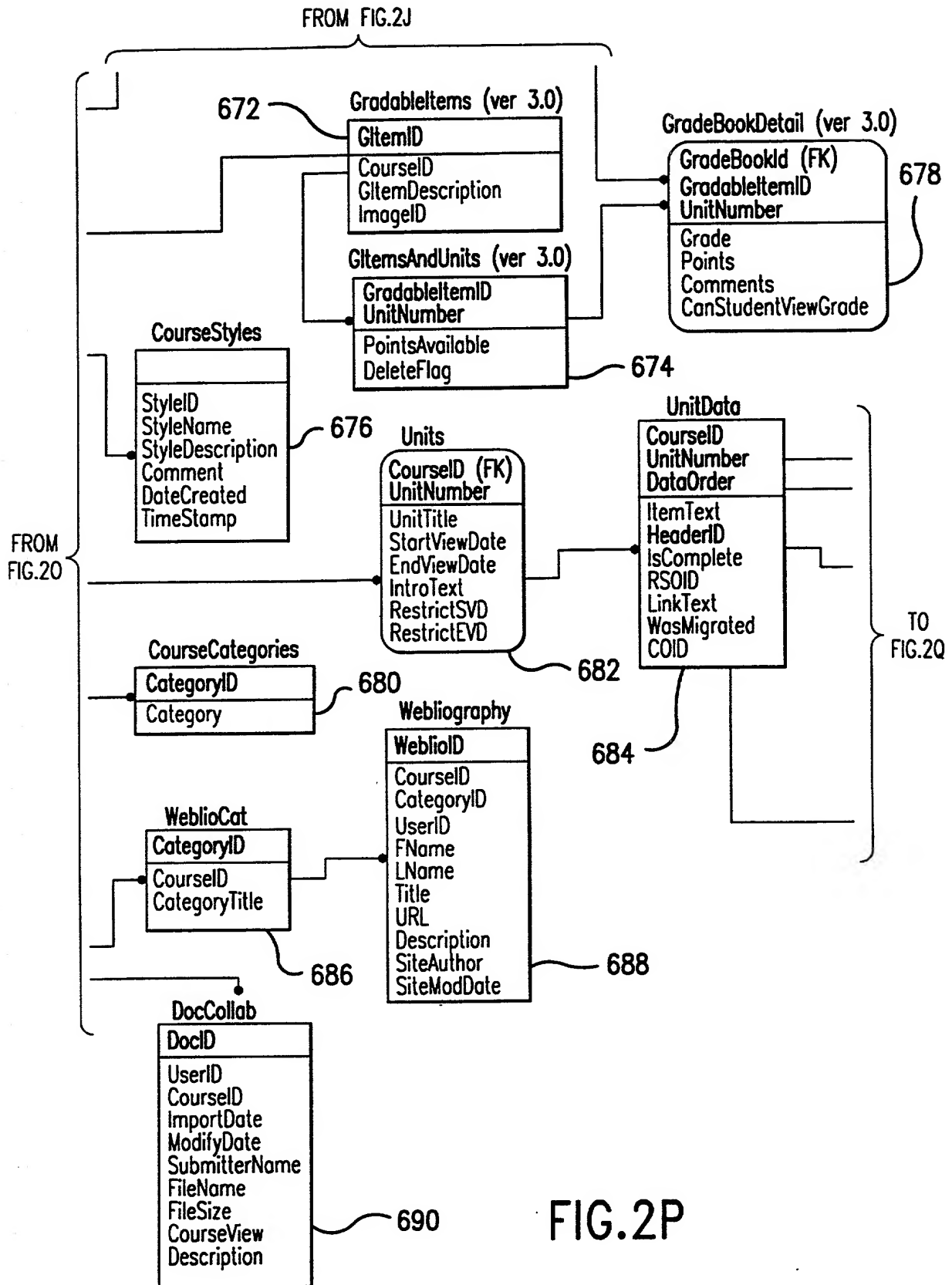


FIG.20



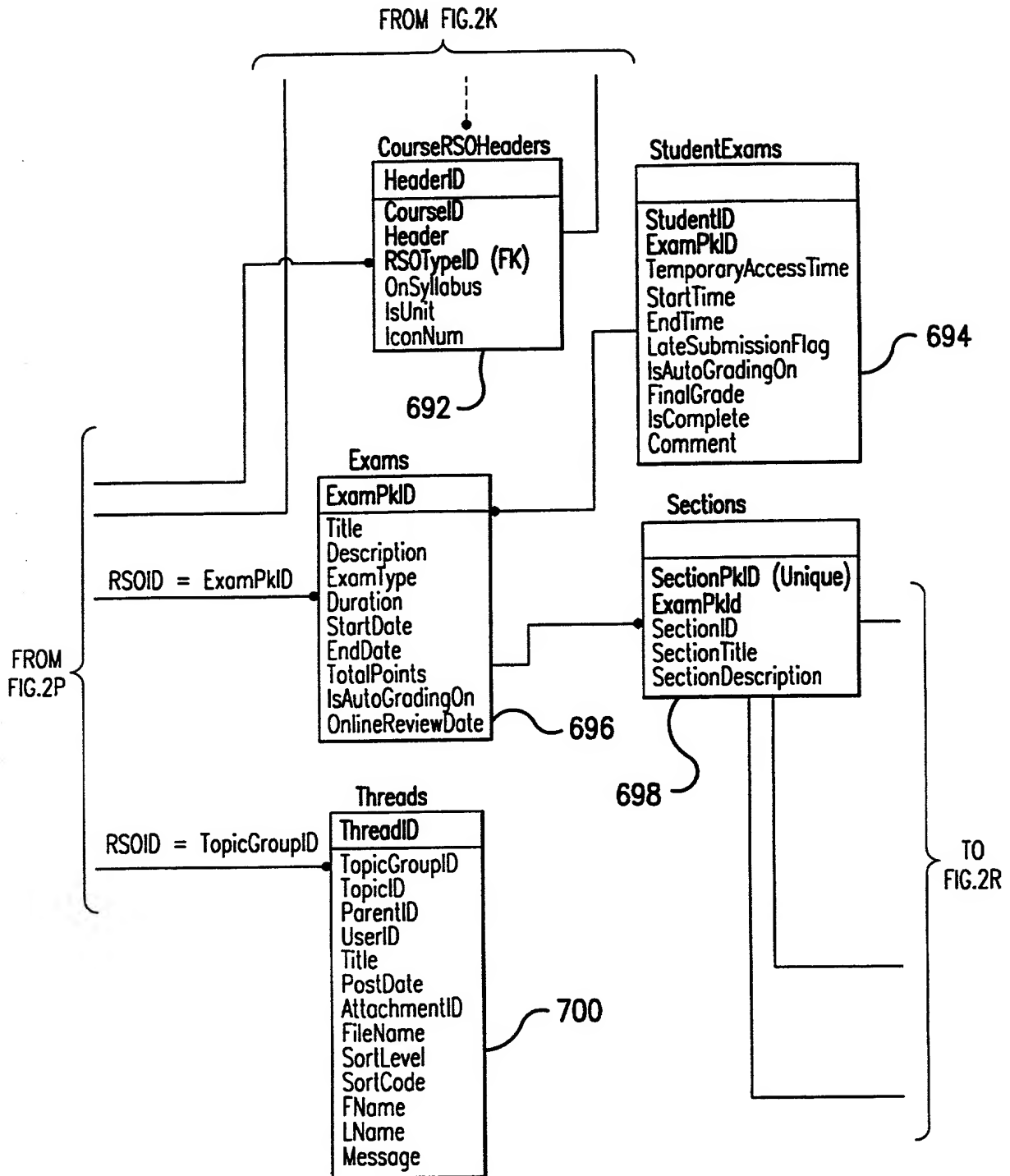
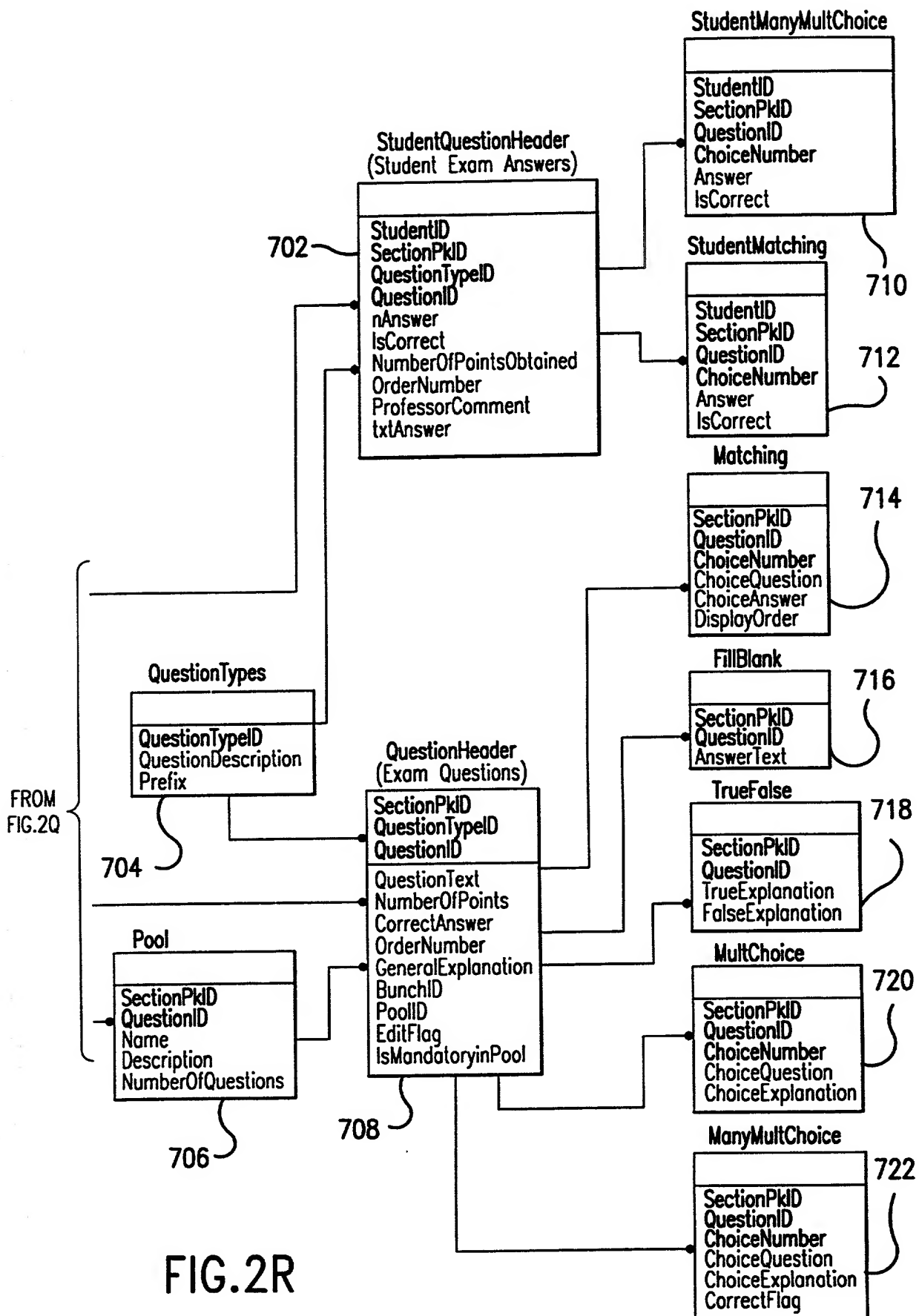


FIG.2Q



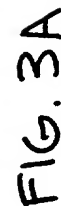


FIG. 3A

Course Home Page – student view

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

818
846
830
822
832
820
838
836
834
824
826

Course Home Page - Cell Biology - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites History Print Edit Discard

Address http://online.edu/re/A_CourseHomePage.real?CourseID=34475&CNModelID=8148&Action=SYLLABUS&47=37959

BIOL 3611- OL1 | Cell Biology

Professor: Marc Goalstone – 844

8/17/99 4:12:08 PM Mountain Time

HOME PAGES: [University of Colorado Online](#) / [Jana Warner](#) / [BIOL 3611- OL1](#) – 846

844

Course Home

Course Information

Message Center

Email Class

Online Chatroom

Document Sharing

Weblog/Adviser

Student Notebook

Student Journal

Grader Book

Help Desk

Interactive Syllabus

Click here for Introductory Video (Video)

Audio Homepage Introduction (Audio)

Knowledge Bank

Click here for Frequently Asked Questions

8087

Unit

Title

1 June 11-16

2 June 17-19

3 June 19-20

4 June 21-27

5 June 28-July 4

6 July 5-11

7 July 12-18

8 July 19-25

814

Key

Assignment

Exam

Exam Key

Important Notice

Reading

Study Guide

Threaded Discussion

Unit Audio

806

812

FIG 3B

Document Sharing/Collaboration

816

Course Home Page
Document Collaboration
Final Class
Grade Book
Help Desk
Policies & Procedures
Message Center
Online Chatroom
Student Journal
Student Notebook
Weblography
Portfolio

Document Collaboration

848

Download file

PC users - Hold your mouse over the document name, click your right mouse button and scroll to 'Save Target As...' (E) or 'Save Link As...' (Netscape) on the menu that appears.

Mac users - Click and hold on the document name until a menu window appears. Choose the option that allows you to save the document on your computer.

Kevin Himmel HBSP

File Name	Description	Owner	Date	Size	Icon
Chapter 1.htm	Please read this during Week 4	Sarah Allen	8/9/99	15,518 bytes	

850

SHARE SELECTED FILE(S) (ADMIN ONLY)
DELETE SELECTED FILE(S) (ADMIN ONLY)

Upload File To

File Name

862 863

Description (required) - 864

Owner

870

Sarah Allen	8/9/99
-------------	--------

Upload File

ADMIN ONLY
LINKS

[Course Manager](#)
[Profile](#)

FIG. 3C

email class

Course Home Page - Cell Biology - Microsoft Internet Explorer

Address: http://cuonline.edu/re/A_EmailCourse.real?Action=EMAIL_C&List=0&CourseID=34475&CModelID=8148&47=37959#email

Online Chatroom
Document Sharing
Weblog/rap/nyell
Student Notebook
Student Journal
Grade Book
Help Desk

816

☐ Professor M. Goalstone (Marc.Goalstone@UCHSC.edu)

Cell Biology

☐ All Enrolled Users - 874

► show email list **

872

From: Jana Warner - 876
Date: 8/17/99
Subject: 878

Message:

880

Attachment:

884 } 882

817 25

Gradebook – student view

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

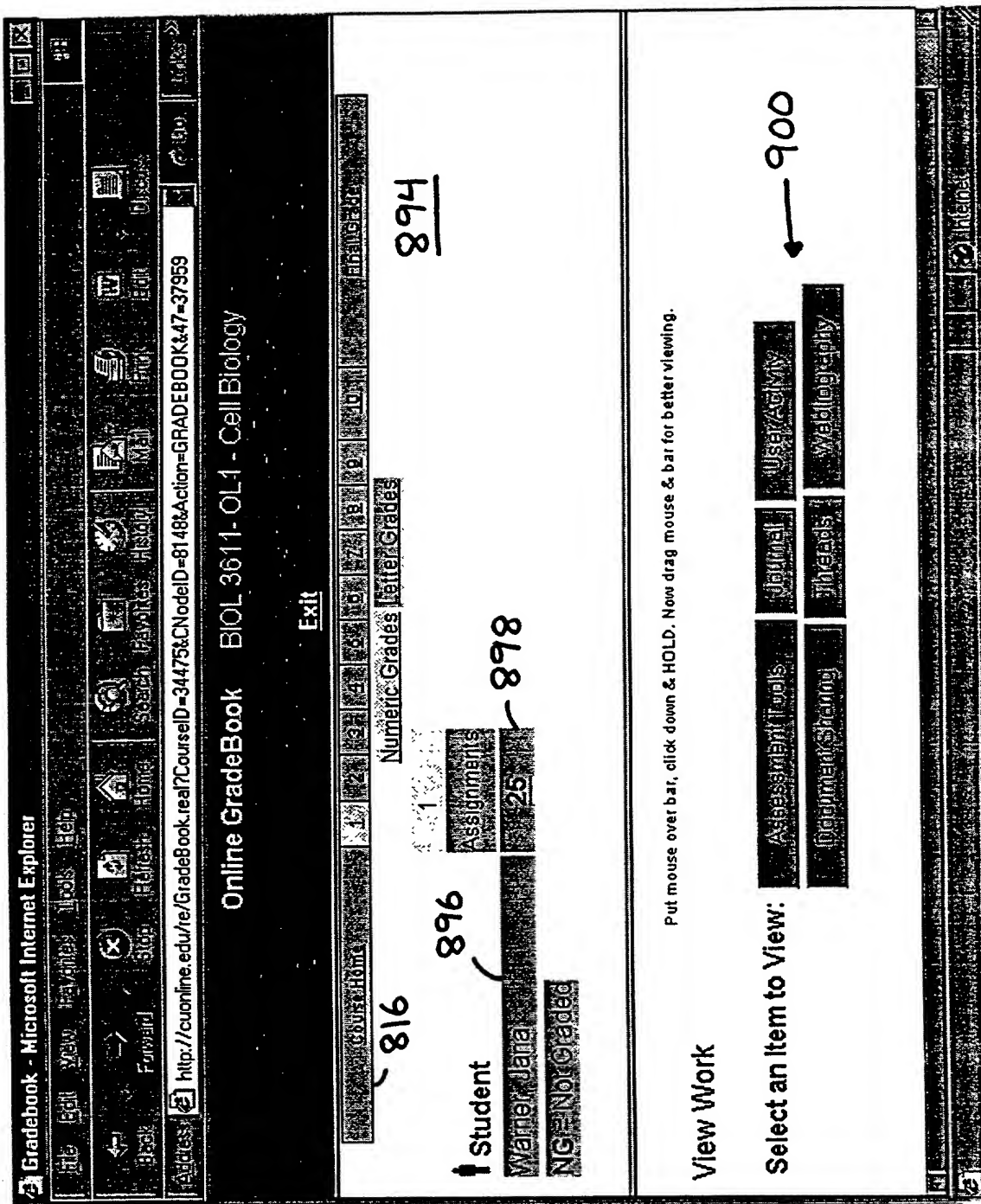


FIG. 3F

Message Center

3/27/2003 11:00 AM

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

Course Home Page - Kevin Himmel HBSP - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit

Address http://gregu.ualed.com/te/A_MsgCtr.html?CourseID=34701&CNodeID=3406&Action=MESSAGECENT&47-28779

Case | Kevin Himmel HBSP
Professor: None
8/8/99 7:33:10 PM Mountain Time

HOME PAGES: [Greg University](#) / [Sarah Allen](#) / [Case](#)

Course Home Page
Document
Collaboration
Email/Glass
Grade Book
HelpDesk
Policies & Procedures
Message Center
Online Chatroom
Student Journal
Student Notebook
Webinar/Intranet/SMI

816

Message Center

Post a message (admin only)

Sarah Allen | 8/8/99 7:33:13 PM

Test on Monday
There will be a test on Monday instead of Friday. Please complete by 9:00 pm. Thank you.

Delete this message (Admin Only)

Post a message (admin only)

905

eCollege.com

902

FIG. 36

Online chatroom

207020" 45/1300"

Course Home Page - Cell Biology - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home

Search Favorites History Mail Print

Address http://cuonline.edu/te/A_Chat.real?CourseID=34475&Room=BIOL3611_344750

BIOL 3611- OL1 | Cell Biology

Professor: Marc Goalstone

8/17/99 4:09:07 PM Mountain Time

816

HOME PAGES: [University of Colorado Online](#) / [Jana Warner](#) / [BIOL 3611- OL1](#)

Chat | [View Chat Logs](#) | [Help](#)

Course Home

Course Information

Message Center

Email Class

Online Chatroom

Document Sharing

Weblography

Student Notebook

Student Journal

Gradebook

Help Desk

912

User: Jana Warner Room: BIOL3611_344750 Room Users: 1

908

914

Jana Warner

910

FIG. 3H

2000-06-28 15:00

Student Journal

Case | Kevin Himmel HBSP
Professor: None
8/9/99 7:40:23 PM Mountain Time

eCollege^{AM}

HOMEPAGES: Greg University / Sarah Allen / Case

816

[Course Home Page](#)
[Document](#)
[Collaboration](#)
[Email Class](#)
[GradeBook](#)
[HelpDesk](#)
[Policies & Procedures](#)
[Message Center](#)
[Online Chatroom](#)
[Student Journal](#)
[Student Notebook](#)
[WebLibrary](#)
[Prof Gradebook](#)

Student Journal

916

--> Start New Journal Entry - 918

ENTRIES ▶ EXPAND ALL | COLLAPSE ALL - 920

922

▶ My favorite Chapter

Last modified by student: 8/9/99 7:41:18 PM

Last modified by instructor: 8/9/99 7:41:18 PM

- 924

I thought Chapter 5 was really interesting.

- 926

Prof comments: I'm glad you enjoyed it.

- 928

--> Edit This Journal Entry - 930

▶ What I think

Last modified by student: 8/9/99 7:39:43 PM

Last modified by instructor: Not modified

ADMIN ONLY
LINKS

Course Manager
Profile Help

FIG. 3I

Student Notebook

2002-04-26 16:33:37

816

Course Home

Course Information

Message Center

Email Class

Online Chatroom

Document Sharing

Weblog/Physics

Student Notebook

Student Journal

Grade Book

Help Desk

936

Notebook

Please be sure to click on the "Save Notes" button to avoid losing your notes.

934

SAVE NOTES

932

SAVE NOTES

BIOL 3611-OL1 | Cell Biology

Professor: Marc Goalstone

8/17/99 3:44:28 PM Mountain Time

HOME PAGES: [University of Colorado Online](#) / [Jana Warner](#) / [BIOL 3611-OL1](#)

Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Delete

Address http://cuonline.edu/re/A_Notebook.real?CourseID=34475&CNodeID=8148&Action=NOTEBOOK&47=37959

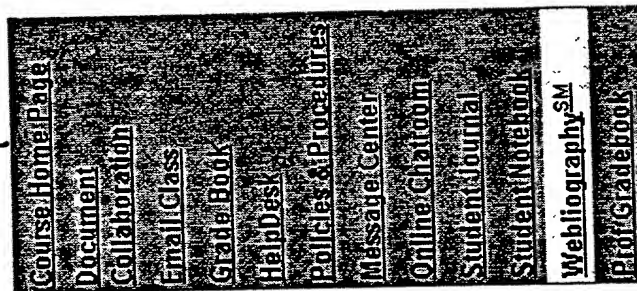
Webliography

BIOL 3611 | Cell Biology
Professor: prof prof
8/8/08 7:52:28 PM Mountain Time

eCollege.com

HOMEPAGES: Greg University / Sarah Allen / BIOL 3611

816



Webliography

- add new entry - 940
- view all entries - 942
- search - 944

Results

2 item(s) are in the webliography.

- Great Resource - 946

Description: This is a great source to find content in cell biology - 948

DELETE (ADMIN ONLY)

- My favorite - 950

Description: This is where you can talk to other cell biology researchers - 952

DELETE (ADMIN ONLY)

ADMIN ONLY
LINKS

Course Manager
Print Help

Threaded Discussion

20733 "4673001"

HOMEPAGES: [Greg University](#) / [Sarah Allen](#) / [Orientation Course](#) / [Unit 5: How Do I Communicate with my P...](#)

Home 1 2 3 4 5 6 7 8 9

816

[Course Home Page](#)
[Document](#)
[Collaboration](#)
[Email Class](#)
[Grade Book](#)
[Help Desk](#)
[Policies & Procedures](#)
[Message Center](#)
[Online Chatroom](#)
[Student Journal](#)
[Student Notebook](#)
[Weblography SM](#)
[Print Gradebook](#)

Thread Topics

[Why are you taking an online course?](#) - 956

[Have ever taken a course online before?](#) - 958

[ADD A TOPIC \(ADMIN ONLY\)](#)

Have ever taken a course online before?

Keith Millner | 7.21.99 4:13:08 pm

- 960

More and more people are taking courses online. If you are one of the pioneering types who has been down this road before, perhaps you have experiences or advice to offer those who are now joining you in this new academic environment.

[RESPOND TO THIS TOPIC](#) | [EDIT TOPIC \(ADMIN ONLY\)](#) | [DELETE TOPIC \(ADMIN ONLY\)](#)

[962](#) [964](#) [966](#)

Responses 968 - 970

display by: [TOPIC](#) | [DATES](#) | [AUTHOR](#) - 972
[show expanded view](#)

L This is great - I am... Susan Karson | 8.9.99 7:54:49 pm - 974

This is great - I am really excited about taking my course online

[RESPOND TO THIS POST](#) | [DELETE THIS POST \(ADMIN ONLY\)](#)

[976](#) [978](#)

[ADMIN ONLY](#)

[LINKS](#)

[Course Manager](#)

[Profile Help](#)

FIG. 3L

Student Exam

2023/04/20

Time Remaining: 0 hours 29 minutes 49 seconds ← 982

1. With online courses you do not have daily contact with your professor. Does this mean all online courses are self-paced? (1 point)

(s)) ~ 984

☐ Yes

☐ No

980

2. Match the following terms with the correct definition. (3 point(s))

<input type="checkbox"/> E-mail	1) This synchronous form of communication can take place with the entire class, a small group, or a private meeting between my professor and me. In this type of communication, everyone involved must be logged in at the same time.
<input type="checkbox"/> Syllabus	2) This is what I would use to contact a fellow student(s) and/or the professor, without the message becoming a permanent part of the course.
<input type="checkbox"/> Online Classroom	3) My instructor may use one of these to communicate due dates for the course, and other course information.

986

Exam Navigation:

Click on the buttons below to switch between exam sections. Clicking on the buttons will also store your answers.

Exam Home Section 1 Section 2 Section 3 ← 988

Store your answers frequently during exam. Submit for grading when you are finished working on the exam.

Store Answers Submit Exam For Grading

990 ~ 992

FIG. 3M

Administrative Pages

8/18/99 9:13:23 AM Mountain Time

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

Administrative Reports - Microsoft Internet Explorer

Address: http://gregu.realed.com/ie/admin/admincenter.real?47=28779

Administrative Pages
8/18/99 9:13:23 AM Mountain Time

HOME PAGES: [Greg University](#) / [Sarah Allen](#) / [Administrative Pages](#)

User Maintenance - 996
[User Enrollment - 998](#)
Assign users to courses.
[User Status - 1000](#)
Change a user's status and course association.
[Create User - 1002](#)
Create a new user.
[Enroll User in Another Enrollable Area - 1004](#)

Administrative Message Center - 1006
[Send a message - 1008](#)
Send a message to a group of users via email or posting on the Personal Student Home Page; place a course block on users.
[Remove a Course Block - 1010](#)
Remove an existing course block.

Reports - 1012
[User reports - 1014](#)
Search for users and view or edit data related to: Enrollment, Registration, Usage Logs, and Administrative Information.
[Course reports - 1015](#)
Review enrollment totals by course. View a list of the currently enrolled users. Adjust current enrolled student statuses.
[University reports - 1016](#)
Reports on the number of courses by enrollable area View user enrollment by enrollable area. View enrollments by semester.

eCollege
994

FIG. 3N

2000 "4649907"
Administrative Pages - User Enrollment

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

User Select - Microsoft Internet Explorer

Address: <http://gregu.realed.com/re/admin/UserSelect.real?Type=enroll&47=28773>

<input type="radio"/>	Molaison, Al	alm@realeducation.com	GU Student	Sales			
<input type="radio"/>	Molaison, Al	alm@realeducation.com	GU Student	Sales			
<input type="radio"/>	Oda, Alan	ayoda@apu.edu	GU Professor	Temporary			
<input checked="" type="radio"/>	Talburt, Anthony	anthonyt@ecollege.com	GU Professor	Real Ed Internal Training	1018	1020	
<input type="radio"/>	Talburt, Anthony	anthonyt@ecollege.com	GU Professor	Sales			
<input type="radio"/>	res, andy	andy@realeducation.com	GU Student	Sales			
<input type="radio"/>	tomorrow's another day	chiss@realeducation.com	GU Student	Sales			

Enroll this User in Courses

FIG. 30

Administrative Pages - User Status

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

User Status Set - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Help Mail Edit Print

Address <http://gregu.rrted.com/te/admin/UserStat.real>

Enrollment Information for andy test

1022

1024

1026

1028

Update

Sales Status			
School	Current Status	Set New Status	New Comment
Sales	GU Student		Enrolled In GregU - Assigned Role by Real System Admin

Course Enrollment			
School	Semester	Course	Current Status
Sales	Demonstration	Orientation	GU Student
Greg University	Special Courses	Orientation Course	GU Student

Added to Course via ADD/DRO

Auto Enroll in Orientation Course (from RS Admin Pages)

F16.3P

Administrative Pages - Enroll User in another Enrollable Area

Enroll a Student in a New Enrollable Area - Microsoft Internet Explorer

HOME PAGES: [Greg University](#) / [Sarah Allen](#) / [Administrative Pages](#) / [User Search](#) / [User Select](#) / [Enroll a User in Another Level](#)

Enroll a User in Another Enrollable Area

Sarah Allen is currently enrolled in the following area(s):

- Sales

Step 3: Select the new enrollable area(s)

Test
EdUSA
ID 1000
Quality Assurance

1034

Step 4: Select the user's role in the new area(s)

1036

Step 5 (Optional): Move Sarah Allen into the selected node(s) only - 1038

☐ Remove Sarah Allen from the currently enrolled area(s). - 1040

FIG. 3Q

Administrative Pages - Send a Message

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

Administrative Message Center - Send Message - Microsoft Internet Explorer

Address: <http://gregu.realed.com/te/admin/SendMessage.real?Type=0&47=28773>

Step 4: Review user selection list, compose and send message

1052

Name	Email Address
<input checked="" type="checkbox"/> Baker, Beth	bethb@ecollege.com
<input checked="" type="checkbox"/> blink	chris@realed.com
<input checked="" type="checkbox"/> bob, bob	rebeccaw@realeducation.com
<input checked="" type="checkbox"/> bob, bob	bob16@realeducation.com
<input checked="" type="checkbox"/> Blum, Becky	beckyb@ecollege.com
<input checked="" type="checkbox"/> Carter, Benjy	carter@realed.com
<input checked="" type="checkbox"/> Dobrin, Benjy	benjy@realed.com
<input checked="" type="checkbox"/> Dobrin, Benjy	benjyd@realeducation.com
<input checked="" type="checkbox"/> Feldman, Betsy	betsyf@heinemann.com

From Email Address (required for email messages) 1044

Message Header 1046

Message Text 1048

1050

☒ send this message as email
☒ send this message as web page post
☐ block these users from their courses

Send Message

FIG. 3R

Administrative Pages - User Reports

User Reports - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discard

Address http://gregu.realed.com/re/admin/UserReports.real?RepType=1&47=28779

Administrative Pages

8/18/99 9:44:13 AM Mountain Time

eCollege 1054

HOME PAGES: [Greg University](#) / [Sarah Allen](#) / [Administrative Pages](#) / [User Search](#) / [User Select](#) / [User Reports](#)

User Reports: [Brett Krichiver](#)

[Enrollment Information](#) | [Registration History](#) | [Payment Information](#) | [Log](#) | [Full Detailed Report](#) | [Administrative Login](#)

School	Semester	Course	Status Date	Status	Comment
Greg University			07/21/99	GU Drop	SYSTEM Auto Enroll Basic Orientation
Greg University			02/03/99	GU Student	SYSTEM Auto Enroll Basic Orientation
Greg University	Special Courses	Orientation Course	07/21/99	GU Student	Auto Enroll in Orientation Course (from RS Admin Pages)
Sales*	N/A	N/A	02/03/99	GU Professor	Enrolled in Greg U Assigned Role by Real System Admin
Sales	Demonstration	GD101	02/25/99	GU Student	
Sales	Demonstration	Sales	02/03/99	GU Professor	

* Denotes enrollable area status

1056

FIG. 35

Administrative Pages - Course Reports

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

Course Reports - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Reload Home Search Favorites History Mail News Groups
Address: http://gigu.ual.edu/te/admin/CourseReports.html

Course Reports

The course enrollment information and the current status of users in the course is listed below. To change a user's status in the course, select it from the 'Set New Status' option and click the 'Update' button at the bottom of the screen.

Quality Assurance Semester - Accredited Buyer Representative

Max Enrollment	25	Max Waitlist	25	Current Pending	0
Current Enrollment	2	Current Waitlist	0		

1058

1062

Name	Email Address	Current Status	Set New Status*	Set Status Comment
Skudlarczyk, Angell, Chris	chris@ecollege.com	GU Student	<input type="checkbox"/>	<input type="text"/>
test test	test	GU Student	<input type="checkbox"/>	<input type="text"/>

Done

FIG. 3T

Administrative Pages - University Reports

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

University Reports - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit ID/Settings

Address http://gregu.realed.com/re/admin/UnivReports.real?ACT=COURSE

Administrative Pages

8/18/99 9:47:34 AM Mountain Time

eCollege.com

HOME PAGES: [Greg University](#) / [Sarah Allen](#) / [Administrative Pages](#) / [University Reports](#)

University Reports

Course Count per Area | [User Count per Enrollable Area](#) | [Enrollment per Semester](#)

1064

Course Count per Area

1066

Area	Courses
Greg University	5
RealEd	1
EduSA	8
ID 1000	0
Quality Assurance	10
Real Ed Internal Training	89
Sales	126

2) Done

FIG. 34

eCS 3.0 - Course Manager

2008-04-23 10:10:00

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

Address: <http://gregu.realed.com/te/CourseManager/CM.real?CourseID=41163&CNodelD=3406&47=28779>

CM AX / MP

Exit Course Manager

File Upload/Download

BIOL 3611

Unit1

Unit2

Unit Audio

Reading

Assignment

Unit3

Unit4

Unit Audio

Reading

Exam Key

Unit5

Unit6

Unit Audio

Reading

Upcoming Events

Unit7

Unit8

Unit9

Unit10

Unit11

Unit Audio

Reading

Upcoming Events

Study Guide

Unit12

Unit13

Unit14

1068

eCollege.com

8/10/98 10:17:51 AM Mountain Time

HOMEPAGES: [Greg University](#) / [Sarah Allen](#) / [BIOL 3611](#)

Course Home Page

Document Collaboration

Email/Glass

GraderBook

HelpDesk

Policies & Procedures

Message Center

Online Chatroom

Student Journal

Student Notebook

Weblog/rap/ry SM

Prof. Graderbook

ADMIN ONLY LINKS

[Course Manager](#)

1069

Unit Title

1

2

3

4

5

6

7

8

1070

Click here for Introductory Video (Video)

1072

1074

1076

January 19-24

January 25-31

February 1-7

February 8-14

February 15-21

February 22-28

March 1-7

March 8-14

516-201

eCS 3.0 - Course Manager

ELECTRONIC EDITOR TOOL FOR
EDUCATIONAL COURSES...
Atty.Dkt.No. 11610.02
Customer No. 20686

Address: <http://gregu.readed.com/te/CourseManager/CM.real?CourseID=41163&CModelD=3406&47=28779>

CM AX / MP

Exit Course Manager

File Upload/Download

BIOL 3611

- Unit1
- Unit2**
 - Unit Audio
 - Reading
 - Assignment
- Unit3
- Unit4
 - Unit Audio
 - Reading
 - Exam Key
- Unit5
- Unit6
 - Unit Audio
 - Reading
 - Upcoming Events
- Unit7
- Unit8
- Unit9
- Unit10
- Unit11
 - Unit Audio
 - Reading
 - Upcoming Events
 - Study Guide
- Unit12
- Unit13
- Unit14

HOMEPAGES: [Greg University](#) / [Sarah Allen](#) / [BIOL 3611](#) / [Unit 2: January 25 - 31](#) / [Unit 2: January 25 - 31](#)

1080

Home 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

1082 →

Unit 2 : January 25 - 31

Unit Audio

Unit Two

Reading

This week you will be introduced to simple laws of thermodynamics (CH 5). By the end of Chapter 5, you should be able to calculate the Gibbs free energy change and determine the spontaneity of a reaction.

Chapter 5 - pp 119 - 133

Lecture Notes - chapter 5

Assignment

Calculate: the ΔG° and determine the spontaneity for the following reaction:

Course Home Page

Document

Collaboration

Email Class

Grade Book

Help Desk

Policies & Procedures

Message Center

Online Chatroom

Student Journal

Student Notebook

Weblography

Prof Gradebook

ADMIN ONLY

LINKS

Course Manager

Prof Help

File 31W

Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
Population	1,000,000	1,050,000	1,100,000	1,150,000	1,200,000	1,250,000	1,300,000	1,350,000	1,400,000	1,450,000	1,500,000	1,550,000	1,600,000	1,650,000	1,700,000	1,750,000	1,800,000	1,850,000	1,900,000	1,950,000	2,000,000	2,050,000	2,100,000	2,150,000	2,200,000	2,250,000	2,300,000	2,350,000	2,400,000	2,450,000	2,500,000	2,550,000	2,600,000	2,650,000	2,700,000	2,750,000	2,800,000	2,850,000	2,900,000	2,950,000	3,000,000	3,050,000	3,100,000	3,150,000	3,200,000	3,250,000	3,300,000	3,350,000	3,400,000	3,450,000	3,500,000	3,550,000	3,600,000	3,650,000	3,700,000	3,750,000	3,800,000	3,850,000	3,900,000	3,950,000	4,000,000	4,050,000	4,100,000	4,150,000	4,200,000	4,250,000	4,300,000	4,350,000	4,400,000	4,450,000	4,500,000	4,550,000	4,600,000	4,650,000	4,700,000	4,750,000	4,800,000	4,850,000	4,900,000	4,950,000	5,000,000	5,050,000	5,100,000	5,150,000	5,200,000	5,250,000	5,300,000	5,350,000	5,400,000	5,450,000	5,500,000	5,550,000	5,600,000	5,650,000	5,700,000	5,750,000	5,800,000	5,850,000	5,900,000	5,950,000	6,000,000	6,050,000	6,100,000	6,150,000	6,200,000	6,250,000	6,300,000	6,350,000	6,400,000	6,450,000	6,500,000	6,550,000	6,600,000	6,650,000	6,700,000	6,750,000	6,800,000	6,850,000	6,900,000	6,950,000	7,000,000	7,050,000	7,100,000	7,150,000	7,200,000	7,250,000	7,300,000	7,350,000	7,400,000	7,450,000	7,500,000	7,550,000	7,600,000	7,650,000	7,700,000	7,750,000	7,80																																																																

Biol 3611

- Unit1
- Unit2
- Unit Audio
- Reading Assignment
- Unit3
- Unit4
- Unit5
- Unit6
- Unit7
- Unit8
- Unit9
- Unit10
- Unit11
- Unit12
- Unit13
- Unit14
- Unit15
- Unit16

Course Manager

To add content to this tool type or paste text into the box below. HTML can be used to format text. To add a link to a document, image, or webpage click on "Add Link".

This week you will be introduced to simple laws of thermodynamics (CH 5). By the end of Chapter 5, you should be able to calculate the Gibbs free energy change and determine the spontaneity of a reaction.

```
<p>Chapter 5 - pp 119 - 133<br><a HREF="External.real?File=CJBIOL3611-8552/unit2/chapter 5/0698-01-chapter5.real" target="_top">Lecture Notes - chapter 5</A>
```

OK Cancel

ADMIN ONLY LINKS

Weblography SM	15-21
Prof.Gradebook	February 22-28
	March 1-7
	March 8-14

EX 3X

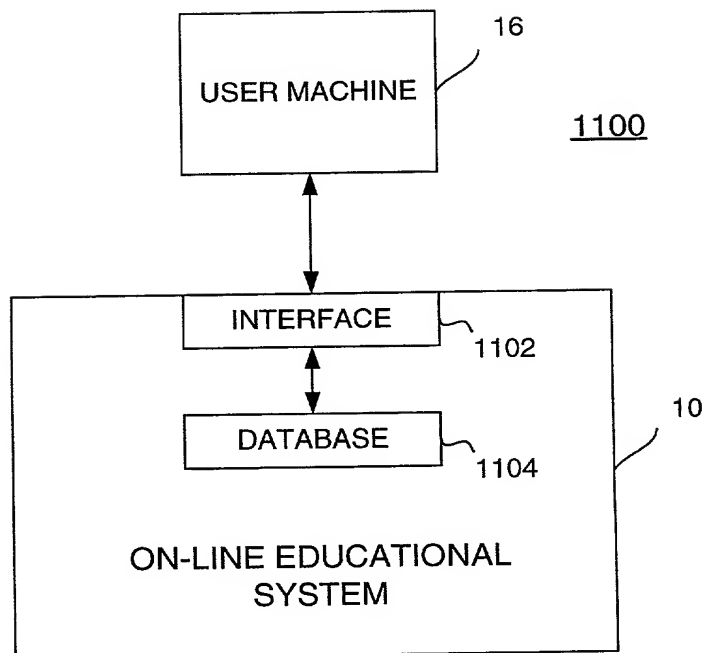


Fig. 4A

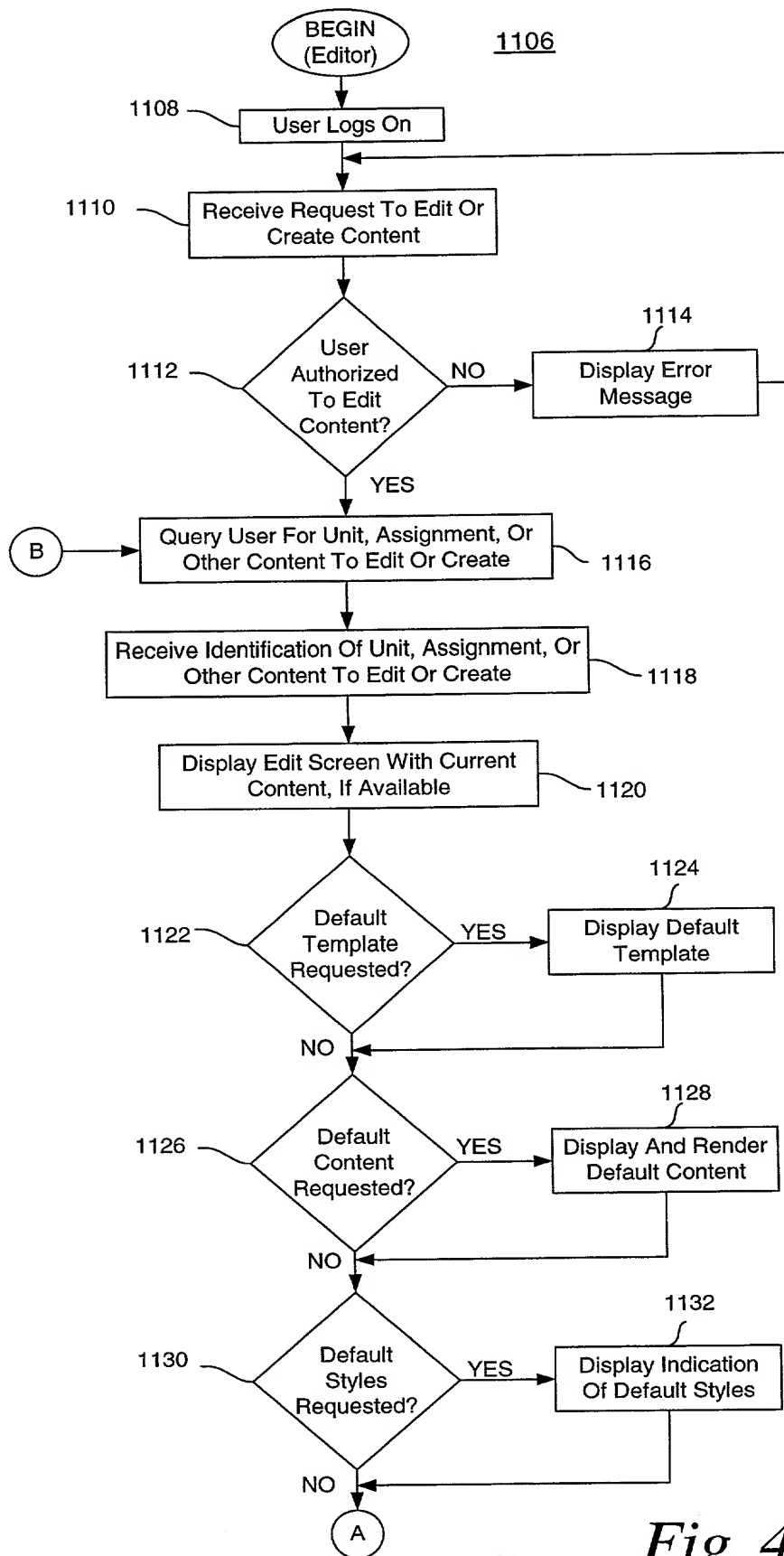


Fig. 4B

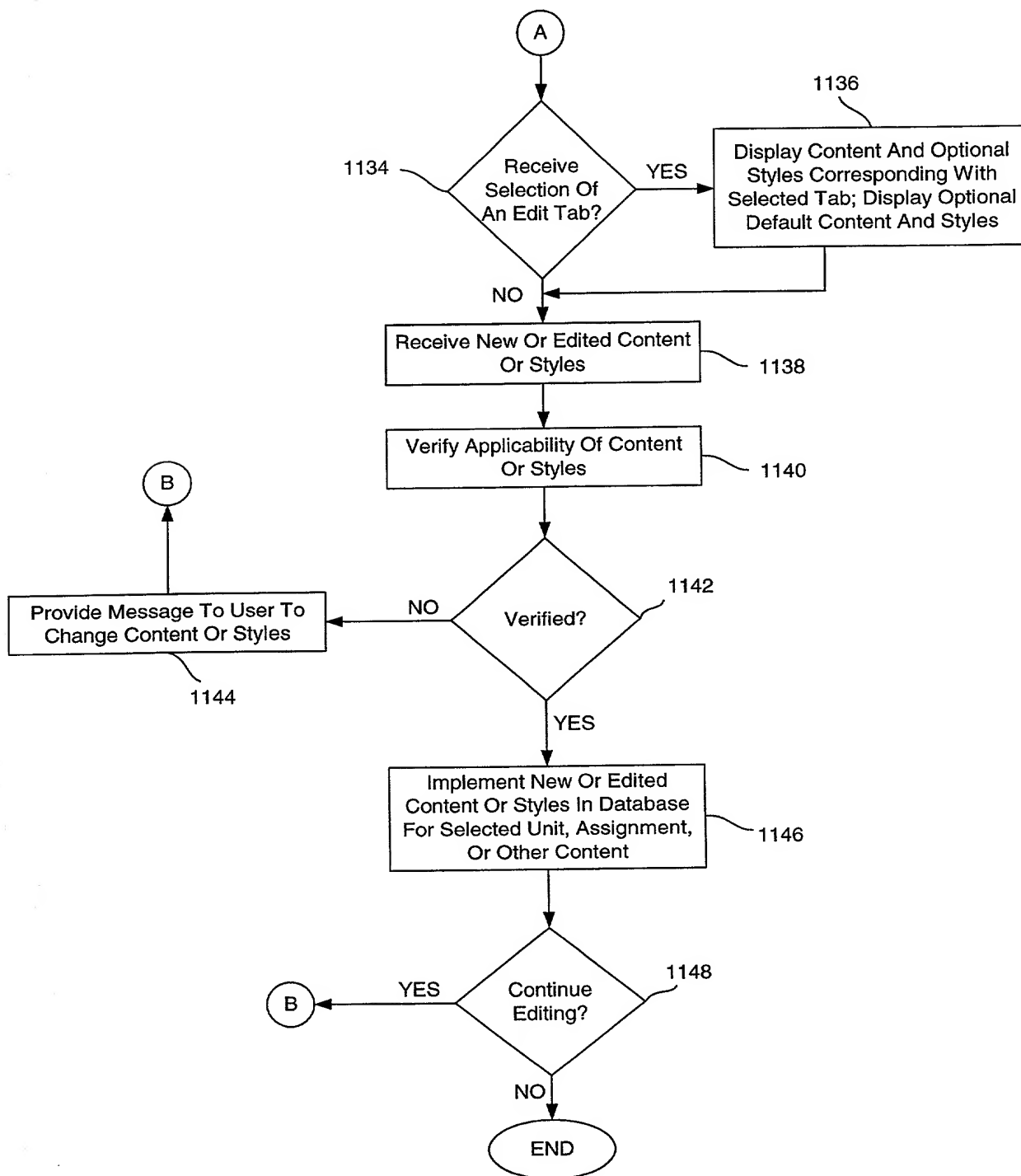


Fig. 4C

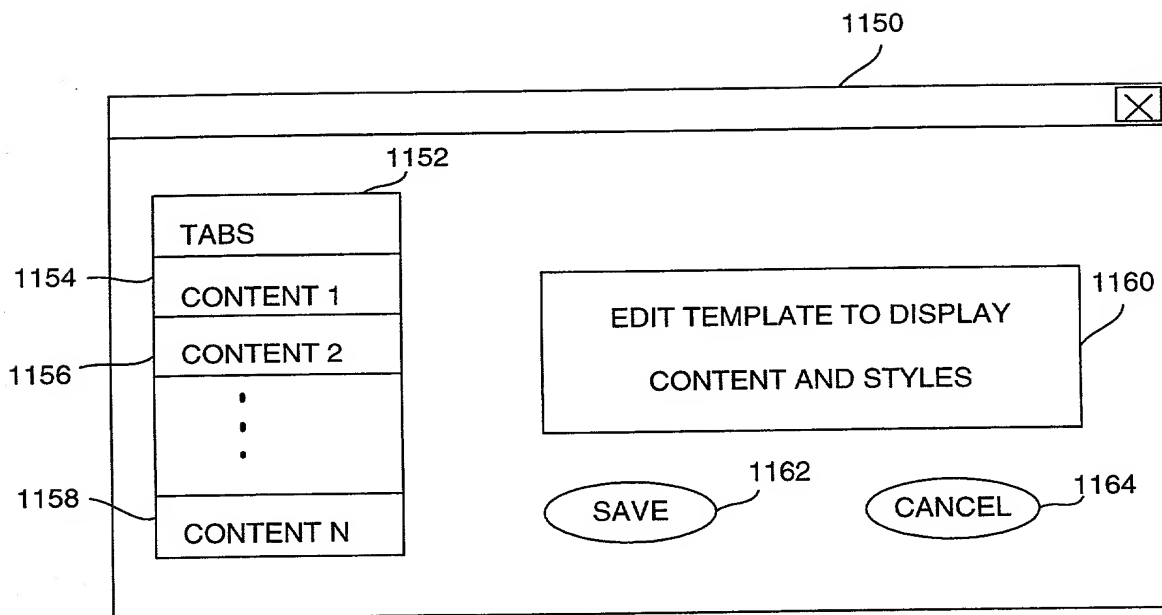


Fig. 4D